4-23-10 LETTING ITEM 284

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1248	04-00136-06-CH	COOK	107	1
	ILLINOIS	CONTRACT NO. 63415		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAU ROUTE 1248 (EVERETT RD.)
COUNTY HIGHWAY 52 (RIVERWOODS RD.) FAU 2698
SECTION 04-00136-06-CH
PROJECT CMM-9003 (153)
ROUNDABOUT CONSTRUCTION, ROADWAY RECONSTRUCTION AND RESURFACING
LAKE COUNTY

PROJECT IS LOCATED IN THE VILLAGES OF METTAWA AND LINCOLNSHIRE

C-91-169-09

D-91-169-09

LOCATION OF SECTION INDICATED THUS:-

TRAFFIC DATA

RIVERWOODS ROAD
2008 ADT: 10,800
SPEED LIMIT: 40 MPH SOUTH, 45 MPH NORTH
DESIGN SPEED: 45 MPH SOUTH, 50 MPH NORTH

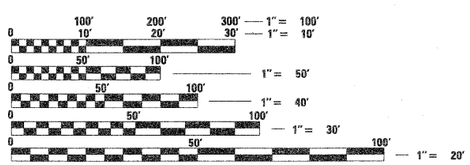
EVERETT ROAD
2008 ADT: 6,750
SPEED LIMIT: 45 MPH
DESIGN SPEED: 50 MPH

INDEX OF SHEETS

SHEET No.	DESCRIPTION
1	COVER SHEET
2 - 3	GENERAL NOTES, STANDARDS, POINTS OF CONTACT
4 - 5	SUMMARY OF QUANTITIES
6 - 18	QUANTITY SCHEDULES
19	ALIGNMENT AND TIES
20 - 21	RIGHT-OF-WAY
22 - 27	TYPICAL SECTIONS
28 - 30	EROSION CONTROL AND GRADING (STAGES 1 - 4)
31 - 48	TRAFFIC CONTROL PLAN
49 - 56	PLAN AND PROFILE SHEETS
57	ROUNDABOUT DETAIL SHEET
58 - 61	PAVEMENT MARKING/LANDSCAPING
62	IRRIGATION PLAN
63 - 72	LIGHTING
73 - 90	CROSS SECTIONS
91 - 107	CONSTRUCTION DETAILS

DESIGN DESIGNATION:

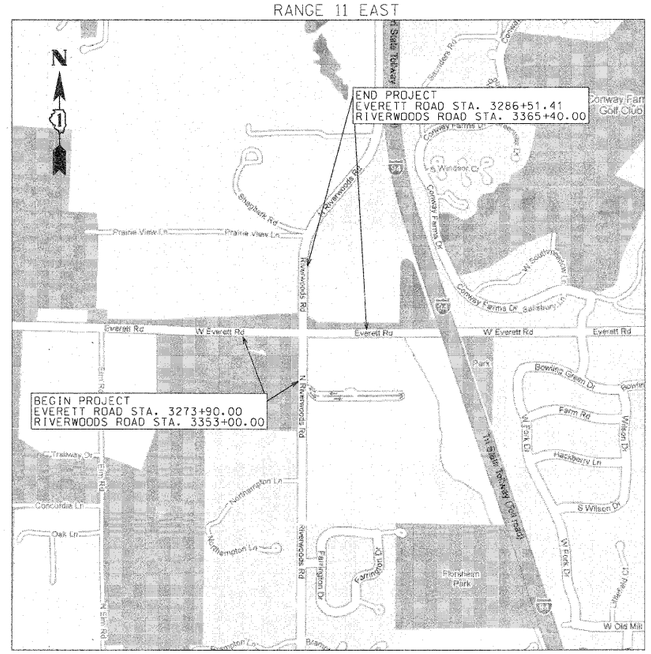
RIVERWOODS ROAD	2241	(30)	MINOR ARTERIAL	0.81	(FD-20)
EVERETT ROAD	1401	(30)	MINOR ARTERIAL	0.24	(FD-20)



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

RANGE 11 EAST



TOWNSHIP 43N

NOT TO SCALE

LOCATION MAP

GROSS AND NET LENGTH OF PROJECT = 2501.41 FT. = 0.474 MI.

IRWIN A. BERMAN
062-029180
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS
1/26/2010

LICENSE EXP: 11/30/2011
SHEETS: 63-72

JOSEPH J. SPRADLING
062-058047
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

LICENSE EXP: 11/30/2011
SHEETS: 1-62, 73-107

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED JANUARY 28 20 10
Mark of Burkler
LAKE COUNTY DIVISION OF TRANSPORTATION - COUNTY ENGINEER

PASSED FEBRUARY 4 20 10
C Hall/ch
DISTRICT 1 ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW FEBRUARY 4, 20 10
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

DESIGNER: JOE SPRADLING (312) 443-4910
FIELD ENGINEER: ALEX HOUSEH (847) 705-4410

CONTRACT NO. 63415

GENERAL NOTES

1. All construction shall be done according to the State of Illinois "Standard Specifications for Road and Bridge Construction" adopted Jan. 1, 2007, the "Supplemental Specifications and Recurring Special Provisions, adopted Jan. 1, 2010, the details in these plans, and the Special Provisions included in the contract documents.

2. Where section or subsection monuments are encountered, the Engineer shall be notified before the monuments are removed. The Contractor shall carefully preserve all property marks and monuments until the owner, authorized surveyor or agent has witnessed or otherwise referenced their location.

3. All elevations shown on these plans are on U.S.G.S. Datum.

4. TEMPORARY SIGN AND MAILBOX RELOCATIONS:

   a. SIGNS: The Contractor shall be required to relocate or remove and replace signs which interfere with his\her construction operations, and to temporarily reset all such signs during construction operations. This work will be included in the cost of MOBILIZATION and no additional compensation will be allowed. All work involving signs shall be governed by the following requirements:

      i. Signs shall not be moved until the progress of work necessitates it.

      ii. Every sign removed shall be re-erected at a temporary location in a workmanlike manner and be visible to the traffic for which it is intended. All such signs shall be maintained straight and clean for the duration of the temporary setting.

      iii. All signs shall be re-erected in permanent locations as the roadway is completed. The horizontal location from the edge of pavement shall be as designated by the Engineer.

      iv. All unused signs shall be returned to the County.

      v. Longer posts may be required at some temporary or permanent sign locations to maintain proper sign elevations.

   b. MAILBOXES: The Contractor is required to temporarily reset mailboxes that interfere with construction. The cost is included in the cost of MOBILIZATION.

5. PUBLIC AND PRIVATE UTILITIES: The Contractor will be required to ascertain the exact locations of utilities and exercise care during his\her construction operations so as not to damage them.

6. TREES

   a. TREE REMOVAL: Cut trees and limbs shall be disposed of within 5 working days. The cut trees and limbs shall be disposed of according to Article 202.03 of the "Standard Specifications".

   b. TREE TRUNK PROTECTION: Prior to construction, the Contractor shall install a snow fence or other highly visible barrier around designated trees in a manner meeting the Engineer's approval. Visual barriers, such as single strand wire or plastic flagging, are not acceptable for this purpose. The barrier shall be maintained in the proper location and in good repair until the completion of construction. Removal and disposal of the barrier shall be the Contractor's responsibility.

   c. TREE ROOT PRUNING: Before any trenching or excavation in the area of a tree, tree roots shall be cut with appropriate root pruning equipment to a minimum of 24" deep. The cuts shall be made 6" to 12" closer to the tree than the construction limit. This allows for root regeneration (within the 6" to 12" area) during the construction period. Pruning shall not be done at the construction limit, since the cut surfaces of the roots will remain exposed resulting in root dieback.

7. EARTH EXCAVATION

   a. The removal of existing bituminous pavement and aggregate base course, unless included in other pay items, shall be considered as EARTH EXCAVATION and no additional compensation will be allowed.

   b. Excavation required for cleaning side road ditches, constructing driveways and/or constructing side road approaches shall be considered included in the cost of EARTH EXCAVATION and no additional compensation will be allowed.

   c. All suitable excess material from sewer trenches, side roads, entrances or other necessary excavations shall be used in the construction of the roadway. Placement and compaction of this material shall be considered included in the cost of EARTH EXCAVATION and no additional compensation will be allowed.

   d. LOOSE MATERIAL:

      i. During the construction operation when any loose material is deposited in the flow line of ditches, gutters or drainage structures so the natural flow of water is obstructed, the material shall be removed at the close of each working day.

      ii. At the conclusion of the construction operations all drainage structures shall be free from all dirt and debris. This work will not be paid for separately but shall be considered included in the cost of EARTH EXCAVATION and no additional compensation will be allowed.

8. UNDERCUTTING:

   a. Soft unstable soils of varying depths may exist at locations within the widening or reconstruction sections which will require their removal and replacement. The replacement material shall be porous granular embankment.

   b. The undercut quantities are based on the soils report recommendations and are as shown on the plans. The actual extent of removal and replacement shall be determined by the Engineer in the field at the time of construction. Undercuts deeper that 12" below the 12" subgrade layer shown on the typical sections (excavation resulting in more than a total of 20" porous granular embankment and 4" aggregate base course beneath the hot-mix asphalt materials) should be justified based upon cone penetrometer testing.

   c. In all cases, the undercut shall extend 12" outside the bottom edges of the proposed 12" subgrade layer, and come up at 1:1 slopes to the existing ground surface.

   d. In all other cut sections, once final elevations are obtained, a proof rolling procedure acceptable to the Engineer shall be followed in order to verify the stability of the subgrade prior to placement the 12" subgrade layer. Verification of subgrade stability shall be done through the use of a cone penetrometer in conjunction with the Illinois Department of Transportation's Subgrade Stability Manual.

9. PHOSPHORUS FERTILIZER NUTRIENT shall not be used on Lake County Highways.

10. TOPSOIL

   a. The work shall also comply with the "Illinois State Agency Historic Resources Preservation Act" (Public Act 86-707, effective January 1, 1990). Under this Act:

      i. The Contractor shall complete an Environmental Survey Request Form for Borrow/Waste/Use Areas (BDE form 2289 1/96 included herein), along with all required attachments, and submit them to the Engineer at the earliest possible date

      ii. The Engineer shall submit the Environmental Survey Request to the Illinois Department of Transportation for review and approval. Any costs incurred associated with said review and approval will be borne by the Contractor.

      iii. The Contractor shall not begin work on any Borrow/Use areas until the Environmental Survey Request has been approved.

   b. The Contractor shall collect one representative soil sample from the proposed growing surface which shall be analyzed by an agricultural laboratory approved by the Engineer. The Contractor shall submit the proposed laboratory name and address to the Engineer at the pre-construction conference. The soils analysis shall include (but is not limited to) the recommended application rates of nitrogen and potassium fertilizer nutrients.

   c. Plan quantities reflect a 4" thick topsoil placement in all disturbed areas.

11. AGGREGATE BASE COURSE: The material shall be limited to crushed gravel, crushed stone or crushed concrete. The plasticity index requirements and the requirements for adding water at the central mixing plant will be waived.

12. BITUMINOUS MATERIALS (PRIME COAT):

   a. MATERIALS:

      i. Emulsified asphalt shall only be used between the dates of May 15th and September 1st. On or before May 15th, and on or after September 1st, RC-70 asphalt shall be used in lieu of emulsified asphalt.

      ii. On days between May 15th and September 1st, when the air temperature is in question, the exact type of priming asphalt shall be determined by the Engineer.

   b. GENERAL:

      i. Prime Coat material shall be SS-1 on hot-mix asphalt surfaces and MC30 on aggregate surfaces.

      ii. The Contractor shall erect, to the Engineer's satisfaction, 36 inch (minimum size) FRESH OIL AHEAD, signs prior to applying the prime coat.

      iii. Shields, covers or other suitable equipment shall be provided by the Contractor to protect the motoring public, adjoining pavement, curbs, and/or structures during the application of the prime coat.

13. PROTECTIVE COAT: The protective coat shall be applied to the exposed surfaces of all concrete pavements and appurtenances regardless of the calendar date limitations contained in the first paragraph of Article 420.18 of the "Standard Specifications".

14. DETECTABLE WARNINGS:

   a. MATERIALS: The detectable warnings shall be stainless steel panels of the sizes shown on the plans and shall be supplied from one of the following manufacturers, or an approved equal:

1)	MetaDome 2136 E. Dayton Street Madsion, WI 53704 Phone # (608) 249-8644 http://www.metadome.com	Product Name: MetaPanel Required Coating System: Meta-Coat II, Federal Yellow
2)	Advantage Tactile Systems, Inc. 241 Main Street Suite 100 Buffalo, NY 14203 Phone # (800) 679-4022 Fax # (800) 679-4023 http://www.advantagetactile.com	Product Name: Advantage Tactile System Required Coating System: Diamond Tek, Federal Yellow

Supplier: RKD Construction
11633 W. Grand Avenue
Melrose Park, IL 60164

15. HOT-MIX ASPHALT SURFACE REMOVAL:

   a. If the milling machine cuts too deep or tears out areas of the existing pavement which were to be saved, the holes shall be filled with leveling binder at the Contractor's expense.

   b. Temporary ramps at butt joints shall be provided according to Article 406.08 of the "Standard Specifications". Temporary ramps will not be paid for separately but shall be included in the contract unit bid price for the hot-mix asphalt surface removal, of the depth specified, scheduled for the ramp location. No additional compensation will be allowed.

   c. Penalty – Failure by the Contractor to provide a temporary bituminous ramp shall be grounds for assessment of a penalty of **$100.00** per day, per ramp location, for each calendar day thereafter that such facility remains incomplete, after written notification from the Engineer. Such penalty shall be deducted from monies due or to become due to the Contractor under the Contract.

[ ] DENOTES ITEMS AND WORK NOT PAID FOR SEPARATELY

Points of Contact

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Village of Mettawa
Yamin A. Yamin,
James Anderson Company
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634/5

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

HDR Engineering, Inc.
30 N. LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

GENERAL NOTES, POINTS OF CONTACT

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	2	107

FILE NAME:

GENERAL NOTES (cont)

16. DRAINAGE

a. EXISTING and PROPOSED DRAINAGE SYSTEM CONNECTIONS: The cost of connecting existing storm sewers to the proposed drainage system and/or connecting proposed storm sewer to existing structures shall be considered included in the cost of the proposed drainage structure and/or the cost of the proposed storm sewer and no additional compensation will be allowed. All necessary additional pipe used will be paid for at the contract unit price for STORM SEWER of the size required.

b. STRUCTURES, FRAMES and GRATES:

i. Unless otherwise noted, locations shown on the plans are to the edge of pavement for structures in the curb and to the center of the structure for all other structures. Flat tops and cones are to be turned so that the frame is closest to the center line of the road, unless otherwise noted on the structure in the plans. All flat tops and cones are assumed to be eccentric. The contractor is responsible for ensuring the proper layout of the flat top slabs and cones.

ii. Frame elevations given on the plans are only to assist the Contractor in determining the approximate overall height of the structure. Frames on all new structures will be adjusted to the final elevation of the area in which they are located as part of the structure cost.

iii. This work shall consist of providing an environmental notice prominently cast into the above grade portion of the frame or grate/lid for all new or proposed drainage structures. The environmental notice shall be "DUMP NO WASTE, DRAINS TO WATERWAYS" or similar wording. The frames, lids and grates shall be according to Section 604 of the "Standard Specifications". The notice shall be cast into the Type 1 lids (open only), Type 8 grates, Type 11 grates, and Type 24 grates. The cost of this work is included in the respective item and no additional compensation will be allowed.

c. PAVEMENT CROSSINGS: Bituminous or concrete pavement crossings shall not be left in gravel overnight. This will include the main road, side streets, private entrances, commercial entrances and parking areas. Temporary bituminous patching at the Contractor's expense may be used in lieu of immediate pavement replacement.

d. UTILITY CROSSINGS: At locations where the proposed storm sewer crosses over utilities, a 4" styrofoam cushion shall be placed under the storm sewer when directed to do so by the Engineer. This work shall be considered included in the cost of the proposed storm sewer and no additional compensation will be allowed.

e. At the conclusion of construction operations, all drainage structures (new and existing) shall be free from all dirt and debris. This work will not be paid for separately, but shall be considered included in the unit bid prices of the contract.

f. Gutter flags along the central roundabout island, truck apron, and all splitter islands will be pitched toward the roadway except where noted on the plans.

17. DRIVEWAYS OR ENTRANCES

a. Existing bituminous, concrete, and gravel driveways and entrances shall be surfaced to 1 foot inside the right-of-way with bituminous concrete surface course as scheduled in the plans.

b. Existing field entrances shall be built up in place to the right-of-way with aggregate base course.

c. The Contractor shall construct all commercial and private driveways according to the plans and/or as directed by the Engineer.

d. The Contractor shall stage his/her work as to maintain ingress and egress to all abutting properties at all times during construction operations.

18. PAVEMENT STRIPING:

a. MATERIALS: Article 1095.01 for Thermoplastic Pavement Markings, paragraph (a) Ingredient Materials, subparagraph (4) Glass Beads, shall be modified by adding the following sentence; The percentage of Glass Beads, Type A, shall be raised to 45% by decreasing the percentage of filler material specified in subparagraph (3) by 15% .

b. GENERAL: The equipment used to apply thermoplastic pavement markings, under this contract, shall be limited to hand-operated equipment only. Truck-mounted equipment shall not be used.

19. RAISED REFLECTIVE PAVEMENT MARKER:

a. Sawcutting the pavement for the installation of raised pavement markers shall be done by means of dry cutting the pavement. The Contractor shall maintain the pavement and the surrounding area in clean, dry condition and shall vacuum the dust and millings from the pavement surface.

b. The method of cutting the pavement may be altered by the Contractor provided the pavement surface and the surrounding area are cleaned to the satisfaction of the Engineer. Alternate methods of cutting the pavement shall be approved by the Engineer.

20. LIGHT POLES:

a. The Contractor is responsible for confirming, in the field, prior to drilling or excavating that proposed roadway light pole foundation locations are not in conflict with any drainage features and existing utilities. Any potential conflicts discovered in the field shall be brought to the Engineer's immediate attention.

b. The lighting system shall be in place, operational, and approved by the Engineer prior to transitioning traffic into the Stage 5 maintenance of traffic configuration, where the intersection will be operating as a single lane roundabout.

21. COOPERATION WITH UTILITIES: The Contractor shall coordinate with applicable utilities according to Article 105.07 of the "Standard Specifications" and the following:

a. The Contractor shall be aware of the location of all utilities and structures in the project area. The Contractor shall conduct construction operations to avoid damage to the above-mentioned utilities or structures.

b. Should any damage to utilities occur, due to the Contractor's negligence, the Contractor shall be responsible for making all repairs, in a manner acceptable to the Engineer. All costs associated with making the repairs shall be the responsibility of the Contractor.

c. The Contractor shall be aware of the locations of vehicle detector loops cut into the pavement. Any vehicle detector loop damaged by the Contractor's negligence shall be repaired by the Contractor in a manner acceptable to the Engineer. All costs associated with making the repairs shall be the responsibility of the Contractor.

d. The Contractor shall notify all utility owners of the proposed construction schedule, and shall coordinate construction operations with the utility owners so that relocation of utility lines and structures may proceed in an orderly manner. Notification shall be in writing with copies transmitted to the Engineer.

22. SIDEWALK: Proposed sidewalk cross slope shall not exceed 2.00%, as determined by the Engineer. Sidewalk exceeding 2.00% cross slope shall be reconstructed by the Contractor at no additional cost.

23. CONSTRUCTION VEHICLES: Construction vehicles and material storage are not permitted on any Village of Lincolnshire property, specifically North Park. The Village acknowledges that work will be required to connect any utilities required for upgrades to the roundabout (irrigation, electrical etc..)

24. PERMITS: The Contractor shall ensure all permits have been obtained prior to commencement of work.

a. Permits included in this contract are the United States Army Corps of Engineers' 404 Permit, Lake County Stormwater Management Commission Watershed Development Permit, and IEPA's 401 Permit.

25. CONSTRUCTION ACTIVITIES:

a. No work shall commence until traffic control requirements are met.

b. Construction activities may occur between 7:00 A.M and 7:00 P.M. Monday through Friday and from 8:30 A.M. to 5:00 P.M. on Saturdays. Construction activities on Sundays are prohibited. No work will be performed on federal holidays observed in Illinois. Construction activities are identified as the operation of heavy equipment, to include but not limited to all construction trucks and equipment. This is to include the warming up of any piece of equipment or turning on engines.

c. The Contractor shall be responsible for repairing pavement or property damaged during construction operations performed by the Contractor's forces, including Subcontractors, at no additional cost, including the pedestrian/bike path.

26. IRRIGATION SYSTEM: The proposed 2-inch copper water service shall have a minimum of 5.5 feet of cover.

27. MAINTENANCE OF EROSION CONTROL SYSTEM: The Contractor shall provide an observation structure or other similar maintenance and inspection structures on drain tiles entering or leaving the roadway right-of-way within the project limits and at the approval of the Engineer. The cost to furnish, install, maintain, and remove these structures shall be included in the unit price for MAINTENANCE OF EROSION CONTROL SYSTEM.

28. MONUMENT SIGNS: The contractor shall coordinate with the Village of Lincolnshire for the graphic design for each of the four (4) monument signs to be located in the central island. This coordination shall occur prior to procuring the four (4) monument signs. The sign will be manufactured by Stalter Wood Products, Gridley, IL, 1-888-797-1987, or an approved equal. Shop drawings shall be provided by the contractor to the Village of Lincolnshire for their review and approval. All coordination with the Village of Lincolnshire and manufacturer, shop drawings, procurement and installation of the monument signs shall be included in the contract unit price for MONUMENT SIGN and no additional compensation will be allowed.

29. SURFACE TESTS: The completed surface course will be tested for smoothness in the wheel paths with a 16 ft straightedge according to Article 406.11 of the "Standard Specifications" and the following:

a. The Contractor shall furnish the appropriate personnel and equipment required to perform the surface course testing according to Article 406.11 of the "Standard Specifications", and to the satisfaction of the Engineer. Traffic control and protection for the testing shall be included. The testing, including all required personnel and equipment, will be considered included in the contract unit price for HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 and provided at no additional cost to the Department.

b. At the Engineer's discretion the surface testing may include sections of the highway repaired with partial depth or full depth pavement patching and/or areas of pavement replacement.

DENOTES ITEMS AND WORK NOT PAID FOR SEPARATELY

IDOT STANDARDS

Standard No.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
542301-02	PRECAST REINFORCED FLARED END SECTION
602001-01	CATCH BASIN TYPE A
602301-02	INLET - TYPE A
602401-02	MANHOLE TYPE A
602601-02	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-02	MANHOLE STEPS
604001-03	FRAME AND LIDS TYPE 1
604051-03	FRAME AND GRATE TYPE 11
604091-02	FRAME AND GRATE TYPE 24
606301-04	PC CONCRETE ISLANDS AND MEDIANS
642001-01	SHOULDER RUMBLE STRIPS
666001-01	RIGHT OF WAY MARKERS
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-03	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701011-02	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-02	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS >= 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
701331-03	LANE CLOSURE, 2L, 2W, WITH RUN-AROUND FOR SPEEDS >= 45 MPH
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE, MULTILANE, 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
704001-06	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-02	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

LCDOT STANDARDS

Standard No.	DESCRIPTION
LC0020	TRENCH WIDTHS FOR TRENCH BACKFILL & PAVEMENT REPLACEMENT, BITUMINOUS
LC2000	UNDERCUT DETAIL
LC2050	TRIANGULAR SILT DIKE INSTALLATION FOR ROADWAY DITCH OR DRAINAGE DITCH
LC2051	PERIMETER EROSION BARRIER INSTALLATION
LC3000	CURB AND GUTTER SUBGRADE OPTIONS
LC4201	CURB RAMPS WITH DETECTABLE WARNINGS, TRAFFIC SIGNAL POSTS & MAST ARMS
LC4103	HOT-MIX ASPHALT APRON FOR AGGREGATE FIELD ENTRANCE
LC4202	CONCRETE WASHOUT FACILITIES
LC4800	TRANSITION FROM AGGREGATE SHOULDER TO B-6.24 FOR 16' OFFSET TO FACE
LC6020	SUB-SURFACE DRAIN
LC6650	WITNESS POST
LC7200	DIRECTION INDICATOR BARRICADES
LC7202	SHOULDER CLOSURE AND TAPER FOR CHANGEABLE MESSAGE SIGN
LC7800	TYPICAL PAVEMENT MARKINGS FOR COUNTY HIGHWAYS
LC7804	SPECIAL DETAIL FOR ROUNABOUTS SIGNING AND PAVEMENT MARKINGS

63415

ITEM NO.	SPECIALTY ITEM	SP	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	LIGHTING	LINCOLNSHIRE IRRIGATION AND LANDSCAPING
							I000-2A	Y030-1E	
1		*	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	237	237		
2			20101000	TEMPORARY FENCE	FOOT	407	407		
3		*	20101100	TREE TRUNK PROTECTION	EACH	46	46		
4	+	*	20101200	TREE ROOT PRUNING	EACH	50	50		
5	+		20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	25	25		
6	+		20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	25	25		
7			20200100	EARTH EXCAVATION	CU YD	5,481	5,481		
8			20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	7,645	7,645		
9		*	20400800	FURNISHED EXCAVATION	CU YD	5,197	5,197		
10		*	20700300	POROUS GRANULAR EMBANKMENT, SPECIAL	TON	5,008	5,008		
11		*	20800250	TRENCH BACKFILL, SPECIAL	CU YD	870	870		
12			21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	10,516	10,516		
13	+	*	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	7,817	7,817		
14	+		25000210	SEEDING, CLASS 2A	ACRE	0.75	0.75		
15	+		25000312	SEEDING, CLASS 4A	ACRE	2	2		
16	+		25000400	NITROGEN FERTILIZER NUTRIENT	POUND	250	250		
17	+		25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	250	250		
18	+		25100630	EROSION CONTROL BLANKET	SQ YD	13,749	13,749		
19	+	*	25400105	PERENNIAL PLANTS	EACH	3,829	3,829		
20	+		28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	284	284		
21		*	28000305	TEMPORARY DITCH CHECKS	FOOT	938	938		
22		*	28000400	PERIMETER EROSION BARRIER	FOOT	5,720	5,720		
23			28000510	INLET FILTERS	EACH	8	8		
24			28100105	STONE RIPRAP, CLASS A3	SQ YD	144	144		
25			28200200	FILTER FABRIC	SQ YD	144	144		
26		*	35100300	AGGREGATE BASE COURSE, TYPE A 4"	SQ YD	690	690		
27		*	35100500	AGGREGATE BASE COURSE, TYPE A 6"	SQ YD	136	136		
28		*	40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	20	20		
29		*	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1,133	1,133		
30			40600300	AGGREGATE (PRIME COAT)	TON	40	40		
31			40600826	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	91	91		
32			40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	61	61		
33			40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	2,740	2,740		
34			40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	1,022	1,022		
35			42000500	PORTLAND CEMENT CONCRETE PAVEMENT 10"	SQ YD	493	493		
36		*	42001300	PROTECTIVE COAT	SQ YD	3,094	3,094		
37			42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	6,201	6,201		
38		*	42400800	DETECTABLE WARNINGS	SQ FT	274	274		
39			44000100	PAVEMENT REMOVAL	SQ YD	13,682	13,682		
40		*	44000160	HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"	SQ YD	2,267	2,267		
41			44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	50	50		
42			44000600	SIDEWALK REMOVAL	SQ FT	3,395	3,395		

ITEM NO.	SPECIALTY ITEM	SP	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	LIGHTING	LINCOLNSHIRE IRRIGATION AND LANDSCAPING
							I000-2A	Y030-1E	
43			48100500	AGGREGATE SHOULDERS, TYPE A 6"	SQ YD	1,113	1,113		
44			50105220	PIPE CULVERT REMOVAL	FOOT	2,209	2,209		
45			54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	4	4		
46			54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	6	6		
47			54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	8	8		
48			X0321583	PIPE ELBOW 18"	EACH	2	2		
49		*	55038400	STORM SEWERS TO BE CLEANED 30"	FOOT	885	885		
50			55100500	STORM SEWER REMOVAL 12"	FOOT	15	15		
51			55100900	STORM SEWER REMOVAL 18"	FOOT	62	62		
52			55101400	STORM SEWER REMOVAL 30"	FOOT	13	13		
53			56200700	WATER SERVICE LINE 2"	FOOT	1,406	1,406		
54			59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	11	11		
55			60201340	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	1	1		
56			60205040	CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	2	2		
57			60207905	CATCH BASINS, TYPE C, TYPE 11 FRAME AND GRATE	EACH	3	3		
58			60208240	CATCH BASIN, TYPE C, TYPE 24 FRAME AND GRATE	EACH	1	1		
59			60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1		
60			60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	2		
61			60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	1	1		
62			60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	1	1		
63			60255500	MANHOLES TO BE ADJUSTED	EACH	4	4		
64			60257900	MANHOLES TO BE RECONSTRUCTED	EACH	1	1		
65			60500040	REMOVING MANHOLES	EACH	1	1		
66		*	60604200	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)	FOOT	2,076	2,076		
67			60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	2,211	2,211		
68		*	60605100	COMBINATION CONCRETE CURB AND GUTTER, TYBE B-6.24 (ABUTTING EXISTING PAVEMENT)	FOOT	681	681		
69		*	60605400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (SPECIAL)	FOOT	245	245		
70		*	60609600	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12 (SPECIAL)	FOOT	352	352		
71			60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	3,878	3,878		
72	+		66500105	WOVEN WIRE FENCE, 4'	FOOT	992	992		
73			66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	12	12		
74			67100100	MOBILIZATION	L SUM	1	1		
75		*	70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1		
76			70106800	CHANGEABLE MESSAGE SIGN	CAL MO	32	32		
77			70300100	SHORT-TERM PAVEMENT MARKING	FOOT	2,500	2,500		
78			70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	20,849	20,849		
79			70300230	TEMPORARY PAVEMENT MARKING - LINE 5"	FOOT	21,097	21,097		
80			70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	333	333		
81			70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	2,500	2,500		
82			70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	11,120	11,120		
83			70400100	TEMPORARY CONCRETE BARRIER	FOOT	80	80		
84	+		78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	160	160		
85	+		78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2,784	2,784		

63415

* DENOTES SPECIALTY PROVISION. + DENOTES SPECIALTY ITEM.

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

SUMMARY OF QUANTITIES

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	4	107

FILE NAME:

ITEM NO.	SPECIALTY ITEM	SP	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	LIGHTING	LINCOLNSHIRE IRRIGATION AND LANDSCAPING
							I000-2A	Y030-1E	
86	+		78000300	THERMOPLASTIC PAVEMENT MARKING - LINE 5"	FOOT	823	823		
87	+		78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	172	172		
88	+		78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	2,169	2,169		
89	+		78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	220	220		
90	+		78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	3,024	3,024		
91	+		78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	5,955	5,955		
92	+	*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	116	116		
93	+		80400100	ELECTRIC SERVICE INSTALLATION	EACH	2		1	1
94	+	*	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1		1	
95	+		81000100	CONDUIT IN TRENCH, 1/2" DIA., GALVANIZED STEEL	FOOT	100			100
96	+		81000300	CONDUIT IN TRENCH, 1" DIA., GALVANIZED STEEL	FOOT	350			350
97	+		81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	200		100	100
98	+		81017510	CONDUIT IN TRENCH, 1" DIA., COILABLE NONMETALLIC CONDUIT	FOOT	305		305	
99	+		81018200	CONDUIT PUSHED, 1" DIA., GALVANIZED STEEL	FOOT	135			135
100	+		81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	330		330	
101	+		81018700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	330		330	
102	+		81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	20		20	
103	+		81603165	UNIT DUCT, 600V, 3-1C NO. 6, 1/C NO. 6 GROUND, (EPR-TYPE RHW), 1" DIA. POLYETHYLENE	FOOT	2,870		2,870	
104	+		81700105	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 12	FOOT	300			300
105	+		81700110	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 10	FOOT	1,845		945	900
106	+		81700120	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 6	FOOT	25		25	
107	+		81701315	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE USE) 3-1/C NO.2	FOOT	600		300	300
108	+		81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	2,555		2,320	235
109	+		82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	18		18	
110	+		82102310	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 310 WATT	EACH	2		2	
111	+		82500350	LIGHTING CONTROLLER, Base Mounted, 240V, 100Amp	EACH	2		1	1
112	+		83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	140		140	
113			542A0220	PIPE CULVERTS, CLASS A, TYPE 1 15"	FOOT	96	96		
114			542C0223	PIPE CULVERTS, CLASS C, TYPE 1 18"	FOOT	2,046	2,046		
115			550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	208	208		
116			550A0090	STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	186	186		
117	+	*	A2008453	TREE, ULMUS ACCOLADE, (HYBRID ELM), 3" CALIPER, BALLED AND BURLAPPED	EACH	12	12		
118	+	*	C2C00724	SHRUB, BERBERIS THUNBERGII (JAPANESE BARBERRY), 2' HEIGHT, CONTAINER	EACH	460	460		
119	+	*	C2C073G3	SHRUB, ROSA RUGOSA DWARF PAVEMENT (DWARF PAVEMENT ROSE), CONTAINER GROWN 3-GALLON	EACH	1,220	1,220		
120	+	*	C2C078G3	SHRUB, ROSA X KNOCK OUT (KNOCK OUT ROSE), CONTAINER GROWN, 3-GALLON	EACH	840	840		
121	+	*	C2010324	SHRUB, SPIREA NIPPONICA SNOWMOUND (SNOWMOUND NIPPON SPIREA), 2' HEIGHT, BALLED AND BURLAPPED	EACH	120	120		
122	+	*	K0030401	PERENNIAL PLANTS, CALAMAGROSTIS ACUTFOLIA KARL FORSTER (FEATHER REED GRASS), 1-GALLON	EACH	992	992		
123	+	*	K1003680	MULCH	SQ YD	31	31		
124		*	X0322494	CURB CUT	FOOT	85	85		

ITEM NO.	SPECIALTY ITEM	SP	CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	LIGHTING	LINCOLNSHIRE IRRIGATION AND LANDSCAPING
							I000-2A	Y030-1E	
125	+	*	X0323574	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6		6	
126	+	*	X0324597	CLOSED CIRCUIT TELEVISION CABINET	EACH	1		1	
127		*	X0325065	CONCRETE MEDIAN SURFACE (STAMPING)	SQ FT	5,962	5,962		
128	+	*	X0325810	WIRELESS ETHERNET RADIO	EACH	1		1	
129	+	*	X0326756	LIGHT POLE, COMPLETE IN PLACE, TYPE 1	EACH	18		18	
130	+	*	X0326757	LIGHT POLE, COMPLETE IN PLACE, TYPE 2	EACH	2		2	
131	+	*	X0326812	CAT 5 ETHERNET CABLE	FOOT	60		60	
132		*	X0712400	TEMPORARY PAVEMENT	SQ YD	7,235	7,235		
133	+	*	X2800500	INLET PROTECTION, SPECIAL	EACH	13	13		
134		*	X6013600	PIPE UNDERDRAINS 4" (MODIFIED)	FOOT	4,071	4,071		
135		*	X6700405	ENGINEER'S FIELD OFFICE, TYPE A (MODIFIED)	CAL MO	8	8		
~~136~~		~~*~~	~~XX003487~~	~~CURB BOX~~	~~EACH~~	~~1~~	~~1~~		
137	+	*	XX003710	BACKFLOW PREVENTER, 2"	EACH	1	1		
138	+	*	XX003885	IRRIGATION SYSTEM	L SUM	1	1		
139		*	XX004878	MAINTENANCE OF TEMPORARY EROSION CONTROL SYSTEMS	L SUM	1	1		
140		*	XX005642	GATEWAY MONUMENT SIGN COMPLETE	EACH	4	4		
141	+	*	XX005940	REMOTE CONTROLLED VIDEO SYSTEM	EACH	1		1	
142	+	*	XX006338	EROSION CONTROL BLANKET (SPECIAL)	SQ YD	7,000	7,000		
143	+	*	XX006570	TREES (SPECIAL)	EACH	17	17		
144	+	*	XX007343	MULCH, SHREDDED HARDWOOD, 4"	SQ YD	79	79		
145	+	*	XX007469	UPLIGHTS	EACH	8			8
146		*	Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	10,015	10,015		
147		*	Z0015300	CURB STOPS 2"	EACH	1	1		
148		*	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	4	4		
149		*	Z0019600	DUST CONTROL WATERING	UNIT	48	48		
150		*	Z0022600	FENCE REMOVAL	FOOT	955	955		
151		*	Z0030255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	4	4		
152	+	*	Z0036200	PAINT CURB	FOOT	1,960	1,960		
153		*	Z0042450	SAWING Pavement (full depth)	FOOT	1,000	1,000		
154		*	△ Z0076600	TRAINEES	HOUR	500	500		

△ Y080

+ DENOTES SPECIALTY ITEM. * DENOTES SPECIALTY PROVISION.

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

SUMMARY OF QUANTITIES

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	5	107

FILE NAME:

INDEX OF SCHEDULE OF QUANTITIES

NO.	DESCRIPTION	SHEET NO.
1	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	6
2	TREE TRUNK PROTECTION	6
3	EARTH EXCAVATION	7
4	TEMPORARY FENCE	7
5	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	7
6	TRENCH BACKFILL, SPECIAL	7
7	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	7
8	TOPSOIL FURNISH AND PLACE, 4"	7
9	EROSION CONTROL BLANKET	7
10	TEMPORARY EROSION CONTROL SEEDING	8
11	PERIMETER EROSION BARRIER	8
12	INLET FILTERS	8
13	STONE RIPRAP, CLASS A3	8
14	FILTER FABRIC	8
15	AGGREGATE BASE COURSE, TYPE A 4"	9
16	AGGREGATE BASE COURSE, TYPE A 6"	9
17	BITUMINOUS MATERIALS (PRIME COAT)	9
18	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	9
19	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	9
20	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	9
21	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	9
22	PORTLAND CEMENT CONCRETE PAVEMENT 10"	9
23	PROTECTIVE COAT	10
24	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	10
25	DETECTABLE WARNINGS	10
26	PAVEMENT REMOVAL	10
27	HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"	10
28	COMBINATION CURB AND GUTTER REMOVAL	10
29	SIDEWALK REMOVAL	10
30	AGGREGATE SHOULDERS, TYPE A 6"	10
31	PIPE CULVERT REMOVAL	10
32	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	11
33	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	11
34	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	11
35	REINFORCED CONCRETE PIPE ELBOW 18"	11
36	PIPE CULVERTS, CLASS A, TYPE 1 15"	11
37	PIPE CULVERTS, CLASS C, TYPE 1 18"	11
38	STORM SEWERS TO BE CLEANED, 30"	11
39	STORM SEWER REMOVAL 12"	11
40	STORM SEWER REMOVAL 18"	11
41	STORM SEWER REMOVAL 30"	11
42	STORM SEWERS, CLASS A, TYPE 1 12"	11
43	STORM SEWERS, CLASS A, TYPE 1 18"	12
44	CONTROLLED LOW STRENGTH MATERIAL	12
45	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	12
46	CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 24 FRAME AND GRATE	12
47	CATCH BASINS, TYPE C, TYPE 11 FRAME AND GRATE	12
48	CATCH BASIN, TYPE C, TYPE 24 FRAME AND GRATE	12
49	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	12
50	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	12
51	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	12
52	CATCH BASINS TO BE RECONSTRUCTED	12
53	MANHOLES TO BE ADJUSTED	12
54	MANHOLES TO BE RECONSTRUCTED	12
55	REMOVING MANHOLES	13
56	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)	13
57	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	13
58	COMBINATION CONCRETE C&G, TYBE B-6.24 (ABUTTING EXISTING PAVEMENT)	13
59	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (SPECIAL)	13
60	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12 (SPECIAL)	13
61	CONCRETE MEDIAN SURFACE, 4"	13
62	WOVEN WIRE FENCE, 4'	13
63	CHANGEABLE MESSAGE SIGN	13
64	TEMPORARY PAVEMENT MARKING - LINE 4"	13
65	TEMPORARY PAVEMENT MARKING - LINE 5"	14
66	TEMPORARY PAVEMENT MARKING - LINE 24"	14
67	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	14
68	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	15
69	THERMOPLASTIC PAVEMENT MARKING - LINE 5"	15
70	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	15
71	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	15
72	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	15
73	PAINT PAVEMENT MARKING 4"	16
74	PAINT PAVEMENT MARKING 5"	16
75	RAISED REFLECTIVE PAVEMENT MARKER	16
76	CURB CUT	16
77	TEMPORARY PAVEMENT	16
78	TEMPORARY DITCH CHECKS	17
79	INLET PROTECTION, SPECIAL	17
80	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	17
81	PIPE UNDERDRAINS 4" (MODIFIED)	18
82	AGGREGATE SUBGRADE 12"	18
83	FENCE REMOVAL	18
84	WATER SERVICE LINE 2"	18
85	PAINT CURB	18
86	SEEDING, CLASS 2A	18
87	SEEDING, CLASS 4A	18

(1) **SCHEDULE OF TREE REMOVAL (6 TO 15 UNITS DIAMETER) (20100110)**

STATION	OFFSET	UNIT
RIVERWOODS ROAD		
3360+86	RT	10
3360+90	RT	10
3361+36	RT	10
	SUBTOTAL	30
EVERETT ROAD		
3277+78	LT	6
3278+86	LT	15
3278+86	LT	12
3278+86	LT	12
3278+86	LT	6
3278+86	LT	6
3281+48	LT	14
3281+48	LT	12
3281+51	LT	12
3281+57	LT	8
3281+61	LT	7
3281+62	LT	8
3281+62	LT	6
3281+62	LT	7
3281+79	LT	12
3281+80	LT	7
3281+87	LT	7
3282+22	LT	10
3282+22	LT	8
3282+64	LT	12
3283+32	RT	6
3284+25	LT	7
3284+25	LT	7
	SUBTOTAL	207
	PROJECT TOTAL	**237**

(2) **SCHEDULE OF TREE TRUNK PROTECTION (20101100)**

STATION	OFFSET	EACH
RIVERWOODS ROADS STAGE 1		
3353+52	LT	1
3354+32	LT	1
3354+38	LT	1
3354+45	LT	1
3354+61	LT	1
3354+66	LT	1
3354+83	LT	1
3355+74	LT	1
3360+73	RT	1
3362+00	RT	1
3363+97	RT	1
3364+16	RT	1
3364+66	RT	1
3365+05	RT	1
3366+14	RT	1
	SUBTOTAL	15
EVERETT ROAD STAGE 1		
3274+36	LT	1
3274+48	LT	1
3274+80	LT	1
3275+12	LT	1
3275+32	LT	1
3275+49	LT	1
3275+55	LT	1
3275+77	LT	1
	SUBTOTAL	8
RIVERWOODS ROADS STAGES 2-4		
3353+52	LT	1
3354+32	LT	1
3354+38	LT	1
3354+45	LT	1
3354+61	LT	1
3354+66	LT	1
3354+83	LT	1
3355+74	LT	1
3360+73	RT	1
3362+00	RT	1
3363+97	RT	1
3364+16	RT	1
3364+66	RT	1
3365+05	RT	1
3366+14	RT	1
	SUBTOTAL	15
EVERETT ROAD STAGES 2-4		
3274+36	LT	1
3274+48	LT	1
3274+80	LT	1
3275+12	LT	1
3275+32	LT	1
3275+49	LT	1
3275+55	LT	1
3275+77	LT	1
	SUBTOTAL	8
	PROJECT TOTAL	**46**

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

FILE NAME:

HDR
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900
HDR Engineering, Inc.

LakeCounty
Division of Transportation

SCHEDULE OF QUANTITIES

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	6	107

3 SCHEDULE OF EARTH EXCAVATION (20200100) AND FURNISHED EXCAVATION (20400800)

LOCATION	EARTH EXCAVATION 20200100 CU YD	EXCAVATION AVAILABLE ADJUSTED FOR SHRINKAGE CU YD	EMBANKMENT VOLUME NEEDED CU YD	BALANCE PER STAGE WASTE (+) NEED (-) CU YD	FURNISHED EXCAVATION 20400800 CU YD
EVERETT ROAD STAGE 1 - STA. 3723+90 TO STA. 3286+51.41	0	0	0	0	0
EVERETT ROAD STAGE 1 TEMP EMBANKMENT	0	0	893	-893	893
EVERETT ROAD STAGE 2 - STA. 3723+90 TO STA. 3286+51.41	503	428	1217	-789	789
EVERETT ROAD STAGE 3 - STA. 3723+90 TO STA. 3286+51.41	577	490	231	259	0
REMOVAL OF EVERETT RD. TMP. EMBANK. - STA. 3723+90 TO STA. 3286+51.41	893	759	0	759	0
EVERETT ROAD STAGE 4 - STA. 3723+90 TO STA. 3286+86	282	240	881	-641	641
EVERETT ROAD STAGE 5 - STA. 3723+90 TO STA. 3286+51.41	103	88	223	-135	135
RIVERWOODS ROAD STAGE 1 - STA. 3353+00 TO STA. 3365+40	0	0	0	0	0
RIVERWOODS ROAD STAGE 1 TEMP EMBANKMENT - STA. 3353+00 TO STA. 3365+40	0	0	233	-233	233
RIVERWOODS ROAD STAGE 2 - STA. 3353+00 TO STA. 3365+40	473	402	496	-94	94
RIVERWOODS ROAD STAGE 3 - STA. 3353+00 TO STA. 3365+40	113	96	0	96	0
REMOVAL OF RIVERWOODS ROAD TEMP EMBANK. - STA. 3353+00 TO STA. 3365+40	233	198	0	198	0
RIVERWOODS ROAD STAGE 4 - STA. 3353+00 TO STA. 3365+40	614	522	905	-383	383
RIVERWOODS ROAD STAGE 5 - STA. 3353+00 TO STA. 3365+40	75	64	105	-41	41
ROUNDABOUT - STA. 100+00 TO STA. 103+58	205	174	1500	-1326	1326
ROUNDABOUT TEMP EMBANKMENT - STA. 100+00 TO STA. 103+58	0	0	662	-662	662
REMOVAL OF ROUNDABOUT TEMP PAVT EMBANKMENT - STA. 100+00 TO STA. 103+58	662	563	0	563	0
REMOVAL OF EXIST. AGG. SHOULDER - EVERETT - STA. 3273+90 TO STA. 3286+51.41	330	281	0	281	0
REMOVAL OF EXIST. AGG. SHOULDER - RIVERWOODS - STA. 3353+00 TO STA. 3365+40	418	355	0	355	0
PROJECT TOTAL	5481				5197
(ASSUMES 15% SHRINKAGE FACTOR)					

4 SCHEDULE OF TEMPORARY FENCE (20101000)

FROM	TO	DIRECTION	LENGTH (FOOT)
EVERETT ROAD			
3276+11	3278+53	RT	246
3277+80	3279+41	LT	161
	SUBTOTAL		407
	PROJECT TOTAL		407

5 SCHEDULE OF REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

LOCATION	FROM STATION	TO STATION	VOLUME (CU YD)
EVERETT ROAD	3723+90	3280+00	978
EVERETT ROAD	3282+00	3286+86	798
RIVERWOODS ROAD	3353+00	3359+00	1,383
RIVERWOODS ROAD	3361+00	3365+40	1,264
ROUNDABOUT	100+00	103+58	718
CONTINGENCY FOR UNDERCUTTING PER SOILS REPORT			2,504
	PROJECT	TOTAL	7,645

~~NOTE: REMOVAL AND DISPOSAL OF UNSTABLE, UNSUTABLE AND/OR EXCESS MATERIAL WILL NOT BE PAID FOR SEPARATELY, BUT IS INCIDENTAL TO AND INCLUDED IN THE CONTRACT UNIT PRICE FOR EARTH EXCAVATION (20200100).~~

6 SCHEDULE FOR TRENCH BACKFILL, SPECIAL (20800250)

PIPE #	PIPE DIAMETER (INCH)	FROM STR #	TO STR #	VOLUME (CU YD)
RIVERWOODS ROAD				
1	18	3	4	4.7
2	18	4	5	7.8
3	18	6	5	3.5
4	18	13	12	15.9
4a	18	12	11	2.2
10	18	5	7	5.9
12	15	25	26	3.9
13	15	27	28	3.9
14	15	29	30	3.9
TP5	18	T7	EXIST	22.2
TP8	12	T8	EXIST	3.9
EVERETT ROAD				
5	12	15	14	4.2
6	12	18	17	3.0
7	12	22	17	1.0
8	12	19	20	3.4
9	18	17	16	1.0
11	12	23	24	2.0
TP1	18	T1	T3	182.5
TP2	18	T2	T4	181.3
TP3	18	T3	T5	7.9
TP4	18	T4	T6	7.4
IRRIGATION SYSTEM				
Riverwoods Pkwy	2			46.9
Riverwoods Rdwy	2			180.7
Everett W Rdwy	2			85.2
Everett E Rdwy	2			85.9
		PROJECT	TOTAL	870.1

7 GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (21001000)

		FT	FT	SQ FT	SQ YD
				90132.20	10515.42
			TOTAL		10515.42
			TOTAL (ROUNDED)		10516

8 SCHEDULE OF TOPSOIL FURNISH AND PLACE, 4" (21101615)

LOCATION	FROM STATION	TO STATION	VOLUME (SQ YD)
EVERETT ROAD	3723+90	3280+00	2,374
EVERETT ROAD	3282+00	3286+86	1,997
RIVERWOODS ROAD	3353+00	3359+00	1,452
RIVERWOODS ROAD	3361+00	3365+40	1,264
ROUNDABOUT			636
IRRIGATION	3354+00	3357+12	94
	PROJECT	TOTAL	7,817

9 SCHEDULE OF EROSION CONTROL BLANKET (25100630)

FROM	TO	OFFSET	AREA (SQ FT)	AREA (SQ YD)
RIVERWOODS ROAD STAGE 1				
3355+65	3358+38	RT	2038.8	227
3357+80	3359+02	RT	989.6	110
3358+64	3359+33	LT	1160	129
3359+76	3361+61	RT	11306.6	1256
3361+61	85+89	RT	5712.1	635
			SUBTOTAL	2356
RIVERWOODS ROAD STAGE 2-4				
3353+00	3358+64	LT	8514.5	946
3353+00	3358+70	RT	6640.2	738
3358+64	3359+33	LT	1160	129
3360+21	3361+58	RT	3279.6	364
3360+87	3365+40	LT	7337.4	815
3360+94	3365+40	RT	2709.1	301
3365+40	85+89	RT	3250.3	361
			SUBTOTAL	3655
EVERETT ROAD STAGE 1				
101+41	3280+10	RT	10370.9	1152
3281+38	9+45	RT	12686.8	1410
			SUBTOTAL	2562
EVERETT ROAD STAGE 2-4				
101+41	3280+10	RT	10370.9	1152
3273+90	3278+27	LT	7094.3	788
3276+71	3280+49	LT	6128.1	681
3281+38	9+45	RT	12686.8	1410
3282+00	3285+00	LT	3484.7	387
3282+24	3286+51	LT	6822.4	758
			SUBTOTAL	5176
			PROJECT TOTAL	13749

63415

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Chicago, IL 60602
312-443-4900

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ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	7	107

FILE NAME:

10

SCHEDULE OF TEMPORARY EROSION CONTROL SEEDING (28000250)					
FROM	TO	OFFSET	AREA (SQ FT)	AREA (ACRE)	WEIGHT (POUND)
RIVERWOODS ROAD STAGE 1					
3355+65	3358+38	RT	2038.8	0.0	5
3357+80	3359+02	RT	989.6	0.0	2
3358+64	3359+33	LT	1160	0.0	3
3359+76	3361+61	RT	11306.6	0.3	26
3361+61	85+89	RT	5712.1	0.1	13
				SUBTOTAL	49
RIVERWOODS ROAD STAGE 2-4					
3353+00	3358+64	LT	8514.5	0.2	20
3353+00	3358+70	RT	6640.2	0.2	15
3358+64	3359+33	LT	1160	0.0	3
3360+21	3361+58	RT	3279.6	0.1	8
3360+87	3365+40	LT	7337.4	0.2	17
3360+94	3365+40	RT	2709.1	0.1	6
3365+40	85+89	RT	3250.3	0.1	7
				SUBTOTAL	76
EVERETT ROAD STAGE 1					
101+41	3280+10	RT	10370.9	0.2	24
3281+38	9+45	RT	12686.8	0.3	29
				SUBTOTAL	53
EVERETT ROAD STAGE 2-4					
101+41	3280+10	RT	10370.9	0.2	24
3273+90	3278+27	LT	7094.3	0.2	16
3276+71	3280+49	LT	6128.1	0.1	14
3281+38	9+45	RT	12686.8	0.3	29
3282+00	3285+00	LT	3484.7	0.1	8
3282+24	3286+51	LT	6822.4	0.2	16
				SUBTOTAL	107
				PROJECT TOTAL	**284**

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SCHEDULE OF PERIMETER EROSION BARRIER (28000400)			
FROM	TO	OFFSET	LENGTH (FT)
RIVERWOODS ROAD STAGE 1			
3355+65	3357+80	RT	215
3359+97	3364+00	RT	466
		SUBTOTAL	681
RIVERWOODS ROAD STAGE 2-4			
3353+00	3357+80	RT	484
3353+00	3358+85	LT	586
3359+97	3364+00	RT	466
		SUBTOTAL	1536
EVERETT ROAD STAGE 1			
101+41	3280+40	RT	1046
3281+49	3284+00	RT	370
		SUBTOTAL	1416
EVERETT ROAD STAGE 2-4			
101+41	3280+40	RT	1023
3273+90	3280+51	LT	694
3281+49	3284+00	RT	370
		SUBTOTAL	2087
		PROJECT TOTAL	**5720**

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SCHEDULE OF INLET FILTERS (28000510)		
STA	OFFSET	EACH
RIVERWOODS ROAD STAGE 2-4		
3358+92	LT	1
3358+92	RT	1
SUBTOTAL		2
EVERETT ROAD STAGE 2-4		
3281+56	RT	1
3281+72	LT	1
3281+73	RT	1
3281+90	RT	1
3282+32	RT	1
3284+07	RT	1
SUBTOTAL		6
PROJECT TOTAL		**8**

13

SCHEDULE OF STONE RIPRAP, CLASS A3 (28100105)						
STRUCTURE #	PIPE DIA. (IN)	STATION (FT)	OFFSET (FT)	LT/RT	GRADATION	QTY (SQ YD)
EVERETT ROAD						
3	18	3280+01.40	59.01	RT	RR3	9
T1	18	120+19.38	20.85	RT	RR3	9
T2	18	102+19.39	25.35	RT	RR3	9
RIVERWOODS ROAD						
6	18	3358+53.47	37.00	LT	RR3	9
13	18	3358+05.00	32.80	RT	RR3	9
T5	18	3358+87.20	33.74	LT	RR3	9
T6	18	3358+89.98	27.10	LT	RR3	9
T7	18	3358+89.98	27.10	LT	RR3	9
20	12	3282+26.00	36.50	LT	RR3	6
21	12	3282+38.00	36.00	LT	RR3	6
24	12	3284+05.69	36.38	LT	RR3	6
T8	12	3281+28.03	52.25	LT	RR3	6
25	15	3362+73.00	35.20	LT	RR3	8
26	15	3360+10.00	35.20	LT	RR3	8
27	15	3363+67.00	34.70	LT	RR3	8
28	15	3364+05.00	34.70	LT	RR3	8
29	15	3364+29.00	34.00	LT	RR3	8
30	15	3364+67.00	33.00	RT	RR3	8
				PROJECT	**TOTAL**	**144**

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SCHEDULE OF FILTER FABRIC (28200200)						
STRUCTURE #	PIPE DIA. (IN)	STATION (FT)	OFFSET (FT)	LT/RT	GRADATION	QTY (SQ YD)
EVERETT ROAD						
3	18	3280+01.40	59.01	RT	RR3	9
T1	18	120+19.38	20.85	RT	RR3	9
T2	18	102+19.39	25.35	RT	RR3	9
RIVERWOODS ROAD						
6	18	3358+53.47	37.00	LT	RR3	9
13	18	3358+05.00	32.80	RT	RR3	9
T5	18	3358+87.20	33.74	LT	RR3	9
T6	18	3358+89.98	27.10	LT	RR3	9
T7	18	3358+89.98	27.10	LT	RR3	9
20	12	3282+26.00	36.50	LT	RR3	6
21	12	3282+38.00	36.00	LT	RR3	6
24	12	3284+05.69	36.38	LT	RR3	6
T8	12	3281+28.03	52.25	LT	RR3	6
25	15	3362+73.00	35.20	LT	RR3	8
26	15	3360+10.00	35.20	LT	RR3	8
27	15	3363+67.00	34.70	LT	RR3	8
28	15	3364+05.00	34.70	LT	RR3	8
29	15	3364+29.00	34.00	LT	RR3	8
30	15	3364+67.00	33.00	RT	RR3	8
				PROJECT	**TOTAL**	**144**

68415

REVISIONS / REMARKS					
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HDR Engineering, Inc.
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SCHEDULE OF QUANTITIES

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	8	107

FILE NAME:

15

SCHEDULE FOR AGGREGATE BASE COURSE, TYPE A 4" (35100300)					
LOCATION	FROM	TO	RT/LT	SURFACE AREA	
				SQ FT	SQ YD
RIVERWOODS RD	3360+18	3360+95	LT	1149.6	128
RIVERWOODS RD	3359+91	3360+94	RT	1683.8	188
RIVERWOODS RD	3358+72	3359+55	LT	687.0	77
RIVERWOODS RD	3357+80	3359+42	RT	2058.1	229
RIVERWOODS RD	71+43	3353+38	RT	607.5	68
				TOTAL	690.00

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SCHEDULE FOR AGGREGATE BASE COURSE, TYPE A 6" (35100500)					
LOCATION	STATION	OFFSET	RT/LT	SURFACE AREA	
				SQ FT	SQ YD
RIVERWOODS RD	3364+48.30	18.24	RT	465.4	52
RIVERWOODS RD	3363+85.00	19.43	LT	391.0	44
RIVERWOODS RD	3362+91.12	21.92	LT	352.3	40
				TOTAL	136

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SCHEDLULE OF BITUMINOUS MATERIALS (PRIME COAT) (40600100)				
STATION	STATION	SURFACE AREA		GALLON
FROM	TO	SQ FT	SQ YD	
RIVERWOODS ROAD				
3353+00	3356+40	14409	1601	801
3364+27	3365+40	3236	360	180
			SUBTOTAL	980
EVERETT ROAD				
3273+90	3274+40	1408	156	78
3286+04	3286+51	1348	150	75
			SUBTOTAL	153
			PROJECT TOTAL	1133

18

SCHEDULE OF POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 (40600826)				
FROM	TO	THICKNESS (IN)	AREA (SQ YD)	WEIGHT (TON)
RIVERWOODS ROAD				
3365+40.00	3364+27.00	0.75	356.3	15
3353+00.00	3356+40.00	0.75	1489.2	63
			SUBTOTAL	78
EVERETT ROAD				
3273+90.00	3274+40.00	0.75	156.0	7
3286+04.00	3286+51.41	0.75	149.8	6
			SUBTOTAL	13
			PROJECT TOTAL	91

19

SCHEDULE OF HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT (40600982)					
FROM	TO	LENGTH (FT)	WIDTH (FT)	AREA (SQ FT)	AREA (SQ YD)
EVERETT ROAD					
3353+00	3353+05	4.5	36.0	162.0	18
3352+96	3353+00	4.5	28.5	128.3	14
				SUBTOTAL	32
EVERETT ROAD					
3273+90	3273+95	4.5	28.0	126.0	14
3286+47	3286+51	4.5	28.5	128.3	14
				SUBTOTAL	28
				PROJECT TOTAL	61

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SCHEDULE OF HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 (40603085)				
FROM	TO	THICKNESS (IN)	AREA (SQ YD)	WEIGHT (TON)
RIVERWOODS ROAD				
3356+40	3359+00	7	901.8	354
3361+00	3364+27	7	1107.5	434
3362+94	3364+27	7	14	5
			SUBTOTAL	793
EVERETT ROAD				
3274+40	3280+00	7	1910.4	749
3282+00	3286+04	7	1396.0	547
3274+40	3277+71	7	34	13
3284+09	3286+04	7	20	8
			SUBTOTAL	1317
INTERSECTION				
3280+00	3282+00	7	1594.2	625
			SUBTOTAL	625
MISCELLANEOUS				
CURB TRANSITION	WEDGE	4.5	16.1	4
			SUBTOTAL	4
			PROJECT TOTAL	2740

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SCHEDULE OF HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (40603340)				
FROM	TO	THICKNESS (IN)	AREA (SQ YD)	WEIGHT (TON)
RIVERWOODS ROAD				
3353+00	3359+00	2	2391.1	268
3361+00	3365+40	2	1463.8	164
3362+94	3365+40	2	4.6	1
			SUBTOTAL	432
EVERETT ROAD				
3273+90	3280+00	2	2066.4	231
3282+00	3286+51	2	1545.9	173
3273+90	3277+71	2	7.1	1
3284+09	3286+51	2	4.5	1
			SUBTOTAL	406
INTERSECTION				
3280+00	3282+00	2	1594.2	179
			SUBTOTAL	179
MISCELLANEOUS				
DRIVEWAYS APRONS		2.5	27.6	4
CURB TRANSITION	WEDGE	1.5	16.1	1
			SUBTOTAL	5
			PROJECT TOTAL	1022

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SUMMARY OF PORTLAND CEMENT CONCRETE PAVEMENT 10 INCH (42000500)				
FROM	TO	OFFSET	AREA (SQ FT)	AREA (SQ YD)
ROUNDABOUT				
			4440.34	493
			SUBTOTAL	493
			PROJECT TOTAL	493

63415

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CH	136	04-00136-06-CH	9	107

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SUMMARY OF PROTECTIVE COAT (42001300)				
	LENGTH (FT)	WIDTH (FT)	AREA (SQ FT)	AREA (SQ YD)
ROUNDABOUT				
			4440.34	493
SIDEWALK				
			5579	620
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12				
	2046	2.1	4296.6	478
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24				
	2446	4.1	10028.6	1115
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (ABUTTING EXISTING PAVEMENT)				
	680	4.1	2788	310
COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12				
	348	2	696	78
			SUBTOTAL	3094
			PROJECT TOTAL	**3094**

NOTE: TOTAL QUANTITY IS THE AREA FOR ONE (1) APPLICATION, BUT THE UNIT PRICE SHALL INCLUDE SECOND APPLICATION WITH NO ADDITIONAL COMPENSATION.

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SUMMARY OF PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH (42400200)				
				SQ FT
RIVERWOODS ROAD/EVERETT ROAD ROUNDABOUT				
NW corner of intersection				1149.60
NE corner of intersection				1683.78
SW corner of intersection				686.95
SE corner of intersection				2058.12
South Leg				607.50
Backflow Preventer Foundation				15.00
			SUBTOTAL	6200.9
			PROJECT TOTAL	**6201**

25

SCHEDULE OF DETECTABLE WARNINGS (42400800)		
STATION	OFFSET	SQ FT
RIVERWOODS ROAD		
3358+78	LT	12
3358+78	RT	20
3358+78	SPLITTER ISLAND	16
3358+78	SPLITTER ISLAND	16
3360+89	LT	20
3360+89	RT	20
3360+89	SPLITTER ISLAND	16
3360+89	SPLITTER ISLAND	16
	SUBTOTAL	136
EVERETT ROAD		
3279+84	LT	20
3279+84	RT	12
3279+84	SPLITTER ISLAND	16
3279+84	SPLITTER ISLAND	16
3281+95	LT	20
3281+95	RT	22
3281+95	SPLITTER ISLAND	16
3281+95	SPLITTER ISLAND	16
	SUBTOTAL	138
	PROJECT TOTAL	**274**

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SCHEDULE OF PAVEMENT REMOVAL (44000100)			
FROM	TO	AREA (SQ FT)	AREA (SQ YD)
RIVERWOODS ROAD			
3356+40	3359+00	8310.3	923
3361+00	3364+27	9211.2	1023
		SUBTOTAL	1947
EVERETT ROAD			
3274+40	3280+00	15729.6	1748
3282+00	3286+04	11594.1	1288
		SUBTOTAL	3036
INTERSECTION			
3280+00	3282+00	13180.6	1465
IRRIGATION			
		1966	218
STAGE 1			
EVERETT ROAD			
3269+97	3280+52	14512	1612
3282+00	3290+32	16417	1824
RIVERWOODS ROAD			
3355+70	3359+43	6392	710
3359+74	3367+24	13327	1481
		STAGE 1 SUBTOTAL	5628
STAGE 2			
EVERETT ROAD			
3277+71	3279+79	2699	300
3279+87	3280+14	589	65
3280+36	3280+67	1449	161
3281+65	3281+92	448	50
3282+00	3284+09	2313	257
		STAGE 2 SUBTOTAL	833
STAGE 3			
RIVERWOODS ROAD			
3356+46	3356+74	2269	252
3358+82	3358+09	432	48
3360+59	3360+86	500	56
3360+93	3360+94	1798	200
		STAGE 3 SUBTOTAL	555
		SUBTOTAL	13682
		PROJECT TOTAL	**13682**

27

SCHEDULE OF HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4" (44000160)			
FROM	TO	AREA (SQ FT)	AREA (SQ YD)
RIVERWOODS ROAD			
3353+00	3356+40	14409.3	1601
3364+27	3365+40	3236.2	360
		SUBTOTAL	1961
EVERETT ROAD			
3273+90	3274+40	1408.1	156
3286+04	3286+51	1347.9	150
		SUBTOTAL	306
		PROJECT TOTAL	**2267**

28

SCHEDULE OF COMBINATION CURB AND GUTTER REMOVAL (44000500)		
FROM	TO	LENGTH (FOOT)
RIVERWOODS ROAD		
3353+00	3353+24	24
3353+00	3353+26	26
	SUBTOTAL	50
	PROJECT TOTAL	**50**

29

SCHEDULE OF SIDEWALK REMOVAL (44000600)		
FROM	TO	AREA (SQ FT)
RIVERWOODS ROAD		
3357+80	3359+32	1490
71+43	3353+38	608
	SUBTOTAL	2098
EVERETT ROAD		
3281+13	3282+27	1297
	SUBTOTAL	1297
	PROJECT TOTAL	**3395**

30

SCHEDULE OF AGGREGATE SHOULDERS, TYPE A 6" (48100500)					
LOCATION	FROM STATION	TO STATION	RT/LT	SURFACE AREA	
				SQ FT	(SQ YD)
RIVERWOODS RD	3362+66.01	3362+83.12	LT	70.6	8
RIVERWOODS RD	3362+99.12	3363+77.05	LT	451.5	51
RIVERWOODS RD	3363+93.00	3365+40.00	LT	919.2	103
RIVERWOODS RD	3363+06.00	3364+39.34	RT	769.5	86
RIVERWOODS RD	3364+57.35	3365+40.00	RT	597.4	67
EVERETT RD	3273+90.00	3277+65.18	LT	2198.1	245
EVERETT RD	3273+90.00	3277+64.71	RT	2198.4	245
EVERETT RD	3284+15.34	3286+51.41	LT	1373.5	153
EVERETT RD	3284+15.19	3286+51.41	RT	1394.8	155
			PROJECT	TOTAL	1113

31

SCHEDULE OF PIPE CULVERT REMOVAL (50105220)				
FROM	TO	LOCATION	DIA (IN)	LENGTH (FOOT)
RIVERWOODS ROAD				
3357+50	3358+87	RT	18	149
3362+74	3363+04	LT	15	41
3363+70	3363+99	LT	15	41
3364+33	3364+62	RT	15	41
EVERETT ROAD				
3273+83	3280+68	RT	18	972
3273+83	3280+60	RT	18	964
		SUBTOTAL		2208
		PROJECT TOTAL		**2209**

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REVISIONS / REMARKS					
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		/ /		DATE:	1/22/2010

FILE NAME:

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty Division of Transportation

SCHEDULE OF QUANTITIES

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	10	107

32

SCHEDULE OF PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12" (54213657)			
STRUCTURE #	STATION	LOCATION	EACH
EVERETT ROAD			
20	3282+26	36.50, LT	1
21	3282+38	36.00, LT	1
24	3284+06	36.38, LT	1
T8	3281+28	52.25, LT	1
		PROJECT TOTAL	4

33

SCHEDULE OF PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15" (54213660)			
STRUCTURE #	STATION	LOCATION	EACH
EVERETT ROAD			
25	3362+73	35.20, LT	1
26	3360+10	35.20, LT	1
27	3363+67	34.70, LT	1
28	3364+05	34.70, LT	1
29	3364+29	34.00, LT	1
30	3364+67	33.00, RT	1
		PROJECT TOTAL	6

34

SCHEDULE OF PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18" (54213663)			
STRUCTURE #	STATION	LOCATION	EACH
EVERETT ROAD			
3	3280+01	59.01, RT	1
RIVERWOODS ROAD			
6	3358+53	37.00, LT	1
13	3358+05	32.80, RT	1
T5	3358+87	33.74, LT	1
T6	3358+90	27.10, LT	1
T7	3358+90	27.10, LT	1
INTERSECTION			
T1	120+19	20.85, RT	1
T2	102+19	25.35, RT	1
		PROJECT TOTAL	8

35

SCHEDULE OF REINFORCED CONCRETE PIPE ELBOW 18" (X0321583)			
STRUCTURE #	STATION	LOCATION	EACH
EVERETT ROAD			
T3	3280+42.54	59.55 RT	1
T4	3280+36.06	64.12 RT	1
		PROJECT TOTAL	2

36

SCHEDULE OF PIPE CULVERTS, CLASS A, TYPE 1 15" (542A0220)			
STRUCTURE I.D.			
STRUCTURE #	FROM	TO	LENGTH (FOOT)
12	25	26	32
13	27	28	32
14	29	30	32
		SUBTOTAL	96
		PROJECT TOTAL	96

37

SCHEDULE OF PIPE CULVERTS, CLASS C, TYPE 1 18" (542C0223)			
STRUCTURE I.D.			
PIPE #	FROM	TO	LENGTH (FOOT)
TP1	TP1	TP3	916
TP2	TP2	TP4	914
TP3	TP3	TP5 & 5	36
TP4	TP4	TP6 & 7	44
TP5	TP7	EXIST	136
		SUBTOTAL	2046
		PROJECT TOTAL	2046

38

SCHEDULE OF STORM SEWERS TO BE CLEANED, 30" (55038400)		
STRUCTURE I.D.		
FROM	TO	LENGTH (FOOT)
7	11	36
11	14	56
14	EX MH, STA 3285+44, 19' RT, EVERETT RD	393
EX MH, STA 3285+44, 19' RT, EVERETT RD	EX MH, STA 3633+66, 20' RT, EVERETT RD	399
	SUBTOTAL	885
	PROJECT TOTAL	885

39

SCHEDULE OF STORM SEWER REMOVAL 12" (55100500)			
FROM	TO	LOCATION	LENGTH (FOOT)
RIVERWOODS ROAD			
-	3360+24	RT	15
		SUBTOTAL	15
		PROJECT TOTAL	15

40

SCHEDULE OF STORM SEWER REMOVAL 18" (55100900)			
FROM	TO	LOCATION	LENGTH (FOOT)
RIVERWOODS ROAD			
-	3358+88	RT	9
-	3360+25	34' LT - 13' RT	53
		SUBTOTAL	61
		PROJECT TOTAL	62

41

SCHEDULE OF STORM SEWER REMOVAL 30" (55101400)			
FROM	TO	LOCATION	LENGTH (FOOT)
RIVERWOODS ROAD			
-	3358+85	LT	13
		SUBTOTAL	13
		PROJECT TOTAL	13

42

SCHEDULE OF STORM SEWERS, CLASS A, TYPE 1 12" (550A0050)			
STRUCTURE I.D.			
PIPE #	FROM	TO	LENGTH (FOOT)
5	15	14	40
6	18	17	24
7	22	17	56
8	19	20	38
11	23	24	34
TP6	TP8	EXISTING	16
		SUBTOTAL	208
		PROJECT TOTAL	208

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312-443-4900

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Division of Transportation

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ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	11	107

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SCHEDULE OF STORM SEWERS, CLASS A, TYPE 1 18" (550A0090)			
	STRUCTURE I.D.		
PIPE #	FROM	TO	LENGTH (FOOT)
1	3	4	28
2	4	5	28
3	6	5	28
4	13	12	80
4a	12	11	10
9	17	16	4
10	5	7	8
		SUBTOTAL	186
		PROJECT TOTAL	186

44

SCHEDULE OF CONTROLLED LOW STRENGTH MATERIAL (59300100)						
LOCATION	STATION	DIA (IN) (IN)	LENGTH (FT)		VOLUME (CU YD)	
EVERETT RD	3281+25	24	94		11	
				TOTAL	11	CU YD

45

SCHEDULE OF CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE (60201340)			
STRUCTURE #	STATION	OFFSET	EACH
EVERETT ROAD			
17	3281+82	32.52' RT	1
		PROJECT TOTAL	1

46

SCHEDULE OF CATCH BASINS, TYPE A, 5'-DIAMETER, TYPE 24 FRAME AND GRATE (60205040)			
STRUCTURE #	STATION	OFFSET	EACH
EVERETT ROAD			
12	3358+87	26.91', RT	1
RIVERWOODS ROAD			
5	3358+89	33.59', LT	1
		PROJECT TOTAL	2

47

SCHEDULE OF CATCH BASINS, TYPE C, TYPE 11 FRAME AND GRATE (60207905)			
STRUCTURE #	STATION	OFFSET	EACH
EVERETT ROAD			
22	3282+30	6.00' RT	1
23	3284+05	5.06' RT	1
ROUNDABOUT			
15	101+85	20.78', LT	1
		PROJECT TOTAL	3

48

SCHEDULE OF CATCH BASIN, TYPE C, TYPE 24 FRAME AND GRATE (60208240)			
STRUCTURE #	STATION	OFFSET	EACH
EVERETT ROAD			
19	3281+81	30.05' LT	1
		PROJECT TOTAL	1

49

SCHEDULE OF MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID (60218400)			
STRUCTURE #	STATION	LOCATION	EACH
RIVERWOODS ROAD			
4	3359+15	50.67', LT	1
		PROJECT TOTAL	1

50

SCHEDULE OF MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID (60221100)			
STRUCTURE #	STATION	OFFSET	EACH
EVERETT ROAD			
16	3281+80	37.28' RT	1
RIVERWOODS ROAD			
7	3358+85	24.63' LT	1
		PROJECT TOTAL	2

51

SCHEDULE OF INLETS, TYPE A, TYPE 11 FRAME AND GRATE (60236800)			
STRUCTURE #	STATION	OFFSET	EACH
EVERETT ROAD			
18	3281+89	7.36' RT	1
		PROJECT TOTAL	1

52

SCHEDULE OF CATCH BASINS TO BE RECONSTRUCTED (60252800)			
STRUCTURE #	STATION	LOCATION	EACH
RIVERWOODS ROAD			
5	3358+89	32.77' LT	1
		PROJECT TOTAL	1

53

SCHEDULE OF MANHOLES TO BE ADJUSTED (60255500)			
STRUCTURE #	STATION	LOCATION	EACH
RIVERWOODS ROAD			
11	3358+89	15.79', RT	2
ROUNDABOUT			
14	102+16	16.55', LT	2
		PROJECT TOTAL	4

54

SCHEDULE OF MANHOLES TO BE RECONSTRUCTED (60257900)			
STRUCTURE #	STATION	OFFSET	EACH
RIVERWOODS ROAD			
7	3358+85	24.63' LT	1
		PROJECT TOTAL	1

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CH	136	04-00136-06-CH	12	107

55

SCHEDULE OF REMOVING MANHOLES (60500040)		
STATION	OFFSET	EACH
RIVERWOODS ROAD		
3360+23	15.40' RT	1
	PROJECT TOTAL	1

56

SCHEDULE OF COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL) (60604200)			
			LENGTH (FOOT)
medians, north of intersection			500.30
medians, south of intersection			548.79
medians, west of intersection			520.29
medians, east of intersection			505.87
		SUBTOTAL	2075.26
		PROJECT TOTAL	2076

57

SCHEDULE OF COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (60605000)			
			LENGTH (FOOT)
northwest of intersection			511.02
northeast of intersection			560.88
southwest of intersection			569.35
southeast of intersection			569.04
		SUBTOTAL	2210.29
		PROJECT TOTAL	2211

58

SCHEDULE OF COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (ABUTTING EXISTING PAVEMENT) (60605100)			
FROM	TO	LOCATION	LENGTH (FOOT)
RIVERWOODS ROAD			
3353+00	3356+40	RT	339.41
3353+00	3356+40	LT	340.62
		SUBTOTAL	680.02
		PROJECT TOTAL	681

59

SCHEDULE OF COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (SPECIAL) (60605400)			
			LENGTH (FOOT)
roundabout			244.68
		SUBTOTAL	244.68
		PROJECT TOTAL	245

60

SCHEDULE OF COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12 (SPECIAL) (60609600)			
			LENGTH (FOOT)
roundabout			351.86
		SUBTOTAL	351.86
		PROJECT TOTAL	352

61

SCHEDULE OF CONCRETE MEDIAN SURFACE, 4 INCH (60618300)		
STATION		SQ. FT.
RIVERWOODS ROAD		
3358+15		801
3359+00		343
3360+75		417
3361+49		506
	SUBTOTAL	2067
EVERETT ROAD		
3279+18		524
3280+00		444
3281+75		321
3282+58		522
	SUBTOTAL	1811
	PROJECT TOTAL	3878

62

SCHEDULE OF PIPE WOVEN WIRE FENCE, 4'			
FROM STA	TO STA	OFFSET	FOOT
RIVERWOODS ROAD			
3360+20	3361+73	RT	216
		SUBTOTAL	216
EVERETT ROAD			
3275+55	3280+40	LT	526
3282+51	3284+98	LT	250
		SUBTOTAL	776
		PROJECT TOTAL	992

63

SCHEDULE OF CHANGEABLE MESSAGE SIGN		
STATION		CAL MO
RIVERWOODS ROAD		
33+53		8
66+66		8
EVERETT ROAD		
96+00		8
14+45		8
	PROJECT TOTAL	32

64

SCHEDULE OF TEMPORARY PAVEMENT MARKING LINE - 4" (70300220)			
FROM	TO	DIRECTION	LENGTH (FOOT)
STAGE 2 - RIVERWOODS ROAD			
3354+93	3358+93	CL	801
3360+16	3367+40	CL	1449
STAGE 2 - EVERETT ROAD			
3269+88	3280+43	CL	2111
3281+76	3290+48	CL	1744
STAGE 3 - RIVERWOODS ROAD			
3355+66	3359+09	SB	343
3354+93	3359+07	NB	414
3360+28	3365+67	SB	538
3360+25	3367+40	NB	715
STAGE 3 - EVERETT ROAD			
3269+87	3280+55	EB	1067
3273+56	3280+46	WB	690
3281+44	3290+48	EB	904
3281+56	3287+43	WB	587
STAGE 4 - RIVERWOODS ROAD			
3354+00	3359+37	CL	1073
3360+45	3365+67	CL	1043
STAGE 4 - EVERETT ROAD			
3273+65	3280+20	EB	655
3273+65	3280+20	WB	655
3281+34	3287+43	EB	609
3281+34	3287+43	WB	609
STAGE 5 - RIVERWOODS ROAD			
3353+00	3359+37	EB	637
3353+00	3359+37	WB	637
3360+45	3365+67	EB	521
3360+45	3365+67	WB	521
STAGE 5 - EVERETT ROAD			
3273+65	3280+20	EB	655
3273+65	3280+20	WB	655
3281+34	3287+43	EB	609
3281+34	3287+43	WB	609
	SUBTOTAL		20849
	PROJECT TOTAL		20849

63415

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CH	136	04-00136-06-CH	13	107

FILE NAME:

65

SCHEDULE OF TEMPORARY PAVEMENT MARKING LINE - 5" (70300230)			
FROM	TO	DIRECTION	LENGTH (FOOT)
STAGE 2 - RIVERWOODS ROAD			
3353+44	3359+15	SB	571
3355+04	3358+93	NB	389
3360+16	3367+43	SB	726
3360+04	3367+30	NB	725
STAGE 2 - EVERETT ROAD			
3269+98	3280+75	EB	1077
3269+58	3280+47	WB	1089
3281+77	3290+67	EB	890
3281+62	3290+47	WB	885
STAGE 2 - INTERSECTION			
-	-	NW CORNER	78
-	-	NE CORNER	68
-	-	SW CORNER	48
-	-	SE CORNER	74
STAGE 3 - RIVERWOODS ROAD			
3355+79	3358+95	SB	316
3355+04	3358+79	NB	375
3360+68	3365+41	SB	473
3360+65	3367+29	NB	664
STAGE 3 - EVERETT ROAD			
3269+97	3280+09	EB	1012
3273+96	3279+89	WB	593
3281+69	3290+47	EB	878
3281+86	3287+43	WB	557
STAGE 3 - INTERSECTION			
-	-	NW CORNER	113
-	-	NE CORNER	112
-	-	SW CORNER	56
-	-	SE CORNER	72
STAGE 4 - RIVERWOODS ROAD			
3355+79	3358+70	SB	292
3353+85	3359+09	NB	525
3360+77	3365+41	SB	464
3360+45	3365+94	NB	549
STAGE 4 - EVERETT ROAD			
3273+41	3279+75	EB	634
3273+95	3279+78	WB	582
3281+43	3287+02	EB	559
3281+61	3287+13	WB	552
STAGE 4 - INTERSECTION			
-	-	NW CORNER	143
-	-	NE CORNER	106
-	-	SW CORNER	144
-	-	SE CORNER	74
STAGE 5 - RIVERWOODS ROAD			
3353+00	3358+10	SB	510
3353+00	3358+53	NB	553
3361+15	3365+40	SB	425
3361+54	3365+40	NB	386
STAGE 5 - EVERETT ROAD			
3273+90	3279+52	EB	562
3273+90	3279+42	WB	552
3282+52	3286+52	EB	400
3282+25	3286+52	WB	427
STAGE 5 - INTERSECTION			
-	-	NW CORNER	186
-	-	NE CORNER	224
-	-	SW CORNER	214
-	-	SE CORNER	192
	SUBTOTAL		21097
	PROJECT TOTAL		**21097**

66

SCHEDULE OF TEMPORARY PAVEMENT MARKING LINE - 24" (70300280)			
FROM	TO	DIRECTION	LENGTH (FOOT)
STAGE 1 - RIVERWOODS ROAD			
-	3358+95	NB	12
-	3360+01	SB	12
STAGE 1 - EVERETT ROAD			
-	3280+41	EB	12
-	3281+51	WB	15
STAGE 2 - RIVERWOODS ROAD			
-	3358+93	NB	11
-	3360+16	SB	11
STAGE 2 - EVERETT ROAD			
-	3280+43	EB	11
-	3281+76	WB	11
STAGE 3 - RIVERWOODS ROAD			
-	3359+07	NB	21
-	3360+28	SB	23
STAGE 3 - EVERETT ROAD			
-	3280+42	EB	22
-	3281+56	WB	19
STAGE 4 - RIVERWOODS ROAD			
-	3359+36	NB	21
-	3360+45	SB	17
STAGE 4 - EVERETT ROAD			
-	3280+19	EB	22
-	3281+34	WB	17
STAGE 5 - RIVERWOODS ROAD			
-	-	NB	21
-	-	SB	17
STAGE 5 - EVERETT ROAD			
-	-	EB	22
-	-	WB	17
	SUBTOTAL		333
	PROJECT TOTAL		**333**

67

SCHEDULE OF THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS (78000100)		
STATION	TYPE	AREA (SQ FT)
RIVERWOODS ROAD		
3359+00	YIELD	22
3359+00	YIELD LINE	18
3282+00	YIELD	22
3355+70	YIELD LINE	18
EVERETT ROAD		
3280+00	YIELD	22
3280+00	YIELD LINE	18
3281+75	YIELD	22
3281+75	YIELD LINE	18
	SUBTOTAL	160
	PROJECT TOTAL	**160**

63415

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CH	136	04-00136-06-CH	14	107

68

SCHEDULE OF THERMOPLASTIC PAVEMENT MARKING LINE 4 INCH (78000200)				
FROM	TO	# OF LINES	FOOT EACH	FOOT
RIVERWOODS ROAD				
3354+61.00	3356+45.00	4	184.0	736
3362+95.00	3364+49.00	4	154.0	616
			SUBTOTAL	1352
EVERETT ROAD				
3276+07.00	3277+70.00	4	163.0	652
3284+10.00	3286+05.00	4	195.0	780
			SUBTOTAL	1432
			PROJECT TOTAL	**2784**

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SCHEDULE OF THERMOPLASTIC PAVEMENT MARKING LINE 5 INCH (78000200)			
LOCATION	# OF LINES	FOOT EACH	FOOT
INTERSECTION			
NW CORNER	1	188.0	188
NE CORNER	1	225.0	225
SW CORNER	1	216.0	216
SE CORNER	1	194.0	194
		SUBTOTAL	823
		PROJECT TOTAL	**823**

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SCHEDULE OF THERMOPLASTIC PAVEMENT MARKING LINE 6 INCH (78000200)				
FROM	TO	# OF LINES	FOOT EACH	FOOT
RIVERWOODS ROAD				
3353+00.00	3354+24.00	1	124.0	124
3354+24.00	3356+14.00	24	2.0	48
			SUBTOTAL	172
			PROJECT TOTAL	**172**

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SCHEDULE OF THERMOPLASTIC PAVEMENT MARKING LINE 8 INCH (78000500)				
FROM	TO	# OF LINES	FOOT EACH	FOOT
RIVERWOODS ROAD				
3356+45.00	3359+10.00	1	564.0	564
3359+09.00	3353+25.00	5	2.0	10
3360+44.00	3360+59.00	5	2.0	10
3361+43.00	3362+95.00	1	514.0	514
			SUBTOTAL	1098
EVERETT ROAD				
3277+70.00	3280+18.00	1	528.0	528
3280+14.00	3280+27.00	5	2.0	10
3281+45.00	3281+64.00	5	2.0	10
3281+64.00	3284+10.00	1	523.0	523
			SUBTOTAL	1071
			PROJECT TOTAL	**2169**

72

SCHEDULE OF THERMOPLASTIC PAVEMENT MARKING LINE 12 INCH (78000600)			
STATION	# OF LINES	FOOT EACH	FOOT
RIVERWOODS ROAD			
3354+79.00	1	1.0	1
3354+98.00	1	3.0	3
3355+18.00	1	5.0	5
3355+37.00	1	7.0	7
3355+56.00	1	9.0	9
3355+76.00	1	10.0	10
3355+95.00	1	12.0	12
3356+14.00	1	14.0	14
3356+34.00	1	15.0	15
3363+00.00	1	9.0	9
3363+20.00	1	8.0	8
3363+40.00	1	7.0	7
3363+60.00	1	5.0	5
3363+78.00	1	4.0	4
3363+98.00	1	3.0	3
3364+18.00	1	2.0	2
3364+38.00	1	1.0	1
		SUBTOTAL	115
EVERETT ROAD			
3276+21.00	1	1.0	1
3276+41.00	1	2.0	2
3276+61.00	1	3.0	3
3276+80.00	1	4.0	4
3277+00.00	1	6.0	6
3277+19.00	1	8.0	8
3277+38.00	1	9.0	9
3277+58.00	1	11.0	11
3284+21.00	1	12.0	12
3284+40.00	1	10.0	10
3284+60.00	1	9.0	9
3284+79.00	1	8.0	8
3284+99.00	1	7.0	7
3285+18.00	1	5.0	5
3285+38.00	1	4.0	4
3285+57.00	1	3.0	3
3285+76.00	1	2.0	2
3285+96.00	1	1.0	1
		SUBTOTAL	105
		PROJECT TOTAL	**220**

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

FILE NAME:

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

SCHEDULE OF QUANTITIES

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	15	107

73

SCHEDULE OF PAINT PAVEMENT MARKING LINE 4 INCH (78001110)				
FROM	TO	# OF LINES	FOOT EACH	FOOT
RIVERWOODS ROAD				
3353+00.00	3354+34.00	2	134.0	268
3364+49.00	86+08.00	2	294.0	588
			SUBTOTAL	856
EVERETT ROAD				
100+41.00	3276+07.00	2	669.0	1338
3286+51.00	9+80.00	2	415.0	830
			SUBTOTAL	2168
			PROJECT TOTAL	**3024**

74

SCHEDULE OF PAINT PAVEMENT MARKING LINE 5 INCH (780011120)				
FROM	TO	# OF LINES	FOOT EACH	FOOT
RIVERWOODS ROAD				
3353+00.00	3359+11.00	1	511.0	511
3353+00.00	3359+53.00	1	553.0	553
3361+16.00	86+08.00	1	627.0	627
3361+54.00	86+08.00	1	588.0	588
			SUBTOTAL	2279
EVERETT ROAD				
100+41.00	3279+42.00	1	1003	1003
100+41.00	3279+52.00	1	1017	1017
3282+25.00	9+80.01	1	839	839
3282+52.00	9+80.00	1	817.0	817
			SUBTOTAL	3676
			PROJECT TOTAL	**5955**

75

SCHEDULE OF RAISED REFLECTIVE PAVEMENT MARKER (78100100)			
FROM	TO		EACH
RIVERWOODS ROAD			
3353+00.00	3358+98.00		36
3360+69.00	3365+09.00		24
		SUBTOTAL	60
EVERETT ROAD			
3275+66.00	3280+07.00		24
3281+74.00	3286+15.00		24
		SUBTOTAL	48
INTERSECTION			
			8
		SUBTOTAL	8
		PROJECT TOTAL	**116**

76

SCHEDULE OF CURB CUT (X0322494)			
STRUCTURE #	STATION	LOCATION	LENGTH (FOOT)
EVERETT ROAD			
1	3279+66.29	23.98, LT	8.50
2	3279+68.69	24.04, RT	8.50
35	3282+23.59	21.88, RT	8.50
36	3282+31.62	20.00, LT	8.50
RIVERWOODS ROAD			
8	3361+07.27	20.08, LT	8.50
9	3361+06.63	26.06, RT	8.50
31	3361+99.85	19.73, LT	8.50
32	3362+30.70	19.21, RT	8.50
33	3358+51.66	23.39, LT	8.50
34	3358+54.52	20.03, RT	8.50
		PROJECT TOTAL	**85**

77

SCHEDULE OF TEMPORARY PAVEMENT (X0712400)			
FROM	TO	AREA (SQ FT)	AREA (SQ YD)
IRRIGATION			
		1966	218
STAGE 1			
EVERETT ROAD			
3269+97	3280+52	14512	1612
3282+00	3290+32	16417	1824
RIVERWOODS ROAD			
3355+70	3359+43	6392	710
3359+74	3367+24	13327	1481
		STAGE 1 SUBTOTAL	5628
STAGE 2			
EVERETT ROAD			
3277+71	3279+79	2699	300
3279+87	3280+14	589	65
3280+36	3280+67	1449	161
3281+65	3281+92	448	50
3282+00	3284+09	2313	257
		STAGE 2 SUBTOTAL	833
STAGE 3			
RIVERWOODS ROAD			
3356+46	3356+74	2269	252
3358+82	3358+09	432	48
3360+59	3360+86	500	56
3360+93	3360+94	1798	200
		STAGE 3 SUBTOTAL	555
		PROJECT TOTAL	**7235**

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

FILE NAME:

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4400

LakeCounty
Division of Transportation

SCHEDULE OF QUANTITIES

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	16	107

78

SCHEDULE OF TEMPORARY DITCH CHECKS (28000305)			
STA	OFFSET	EACH	WIDTH (FT)
RIVERWOODS ROAD STAGE 1			
3356+00	RT	1	14
3357+00	RT	1	14
3361+00	RT	1	14
3364+00	RT	1	14
3365+00	RT	1	14
3366+00	RT	1	14
85+65	RT	1	14
SUBTOTAL		7	98
RIVERWOODS ROAD STAGE 2-4			
3354+00	RT	1	14
3355+00	RT	1	14
3356+00	RT	1	14
3357+00	RT	1	14
3357+95	RT	1	14
3361+00	RT	1	14
3364+00	RT	1	14
3365+00	RT	1	14
3366+00	RT	1	14
85+65	RT	1	14
3357+00	LT	1	14
3358+00	LT	1	14
3358+43	LT	1	14
3361+00	LT	1	14
3362+00	LT	1	14
3363+50	LT	1	14
3364+50	LT	1	14
3365+35	LT	1	14
SUBTOTAL		18	252
EVERETT ROAD STAGE 1			
102+41	RT	1	14
103+41	RT	1	14
104+41	RT	1	14
3274+37	RT	1	14
3275+37	RT	1	14
3276+36	RT	1	14
3277+35	RT	1	14
3278+33	RT	1	14
3279+32	RT	1	14
3280+35	RT	1	14
3282+00	RT	1	14
3283+03	RT	1	14
3284+00	RT	1	14
3285+00	RT	1	14
3286+00	RT	1	14
6+14	RT	1	14
7+13	RT	1	14
3274+36	LT	1	14
3275+37	LT	1	14
3276+38	LT	1	14
3277+39	LT	1	14
3283+00	LT	1	14
3284+00	LT	1	14
3285+00	LT	1	14
3286+00	LT	1	14
SUBTOTAL		25	350

EVERETT ROAD STAGE 2-4			
102+41	RT	1	14
103+41	RT	1	14
104+41	RT	1	14
3274+37	RT	1	14
3275+37	RT	1	14
3276+36	RT	1	14
3277+35	RT	1	14
3278+33	RT	1	14
3279+32	RT	1	14
3280+35	RT	1	14
3282+00	RT	1	14
3283+03	RT	1	14
3284+00	RT	1	14
3285+00	RT	1	14
3286+00	RT	1	14
6+14	RT	1	14
7+13	RT	1	14
	SUBTOTAL	17	238
	PROJECT TOTAL	**67**	**938**

79

SCHEDULE OF INLET PROTECTION, SPECIAL (X2800500)		
STA	OFFSET	EACH
RIVERWOODS ROAD STAGE 1		
3357+48	RT	1
3358+83	LT	1
3360+28	RT	1
3364+27	RT	1
SUBTOTAL		4
RIVERWOODS ROAD STAGE 2-4		
3358+06	RT	1
3358+54	LT	1
3362+70	LT	1
3363+64	LT	1
3364+27	RT	1
SUBTOTAL		5
EVERETT ROAD STAGE 1		
102+21	RT	2
SUBTOTAL		2
EVERETT ROAD STAGE 2-4		
102+21	RT	2
SUBTOTAL		2
	PROJECT TOTAL	**13**

80

SCHEDULE OF FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS (66600105)		
STA	OFFSET	EACH
EVERETT ROAD		
3276+72	LT	1
3279+41	LT	1
3280+08	LT	1
3280+40	LT	1
3281+00	LT	1
3281+44	LT	1
3282+01	LT	1
3282+28	LT	1
3282+50	LT	1
3282+53	LT	1
3285+00	LT	1
3285+00	LT	1
	PROJECT TOTAL	**12**

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

FILE NAME:

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

SCHEDULE OF QUANTITIES

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	17	107

81

SCHEDULE OF PIPE UNDERDRAINS 4" (MODIFIED)			
FROM STA	TO STA	OFFSET	FOOT
RIVERWOODS ROAD			
3356+00	3358+53	RT	220
3356+00	3359+13	LT	277
3360+52	3364+27	RT	395
3360+68	3364+27	LT	376
3361+00	3362+61	LT	162
3361+00	3364+17	RT	317
		SUBTOTAL	1747
EVERETT ROAD			
3274+00	3279+86	RT	593
3274+40	3279+42	LT	516
3278+18	3279+72	RT	169
3279+43	3280+45	LT	141
3279+74	3280+39	RT	89
3281+32	3282+35	LT	124
3281+43	3282+15	RT	103
3282+12	3282+51	RT	63
3282+27	3282+98	LT	83
3283+00	3286+04	LT	318
3284+94	3286+04	RT	125
		SUBTOTAL	2324
		PROJECT TOTAL	**4071**

82

SCHEDULE OF AGGREGATE SUBGRADE 12" (Z0001050)					
		FT	FT	SQ FT	SQ YD
				90132.20	10014.69
			TOTAL		**10014.69**
			TOTAL (ROUNDED)		**10015**

83

SCHEDULE OF FENCE REMOVAL (Z0022800)			
FROM	TO	DIRECTION	LENGTH (FOOT)
EVERETT ROAD			
3277+28	3280+43	LT	325
3281+47	3284+98	LT	360
RIVERWOODS ROAD			
3360+11	3361+12	LT	105
3360+16	3361+74	RT	165
	SUBTOTAL		955
	PROJECT TOTAL		**955**

84

SCHEDULE OF WATER SERVICE LINE 2" (56200700)		
FROM STA	TO STA	FOOT
RIVERWOODS ROAD		
3353+00	3362+09	928
SUBTOTAL		928
EVERETT ROAD		
3278+47	3280+86	238
3280+86	3283+27	240
SUBTOTAL		478
	PROJECT TOTAL	**1406**

85

SCHEDULE OF PAINT CURB (Z0036200)		
FROM	TO	FOOT
RIVERWOODS ROAD		
3366+46.00	3358+72.00	457
3358+84.00	3359+07.00	66
3360+60.00	3360+84.00	71
3360+96.00	3362+94.00	398
	SUBTOTAL	992
EVERETT ROAD		
3277+72.00	3279+77.00	414
3279+89.00	3280+13.00	72
3281+66.00	3281+90.00	66
3282+02.00	3284+08.00	416
	SUBTOTAL	968
	PROJECT TOTAL	**1960**

86

SCHEDULE OF SEEDING, CLASS 2A (25000210)				
FROM	TO	OFFSET	AREA (SQ FT)	AREA (ACRE)
RIVERWOODS ROAD				
3353+00	3358+64	LT	8537.2	0.20
			SUBTOTAL	0.20
EVERETT ROAD				
101+41	3280+54	RT	23458.2	0.54
			SUBTOTAL	0.54
			PROJECT TOTAL	0.73
			USE	**0.75**

87

SCHEDULE OF SEEDING, CLASS 4A (25000312)				
FROM	TO	OFFSET	AREA (SQ FT)	AREA (ACRE)
RIVERWOODS ROAD				
3355+65	3358+73	RT	4312.4	0.10
3355+65	3358+72	RT	1004.7	0.02
3358+83	3359+40	RT	295.1	0.01
3359+95	3360+84	RT	662.9	0.02
3360+21	3360+85	LT	483.0	0.01
3360+19	3361+58	RT	3340.1	0.08
3360+87	3365+40	LT	7337.4	0.17
3360+93	3365+40	RT	7474.1	0.17
3365+40	85+89	RT	3353.3	0.08
			SUBTOTAL	0.65
EVERETT ROAD				
3273+90	3278+27	LT	7265.8	0.17
3276+71	3280+50	LT	6128.1	0.14
3281+47	9+45	RT	26319.7	0.61
3282+00	3285+00	LT	3484.7	0.08
3282+06	3286+51	LT	6822.4	0.16
			SUBTOTAL	1.15
			PROJECT TOTAL	1.80
			USE	**2.00**

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

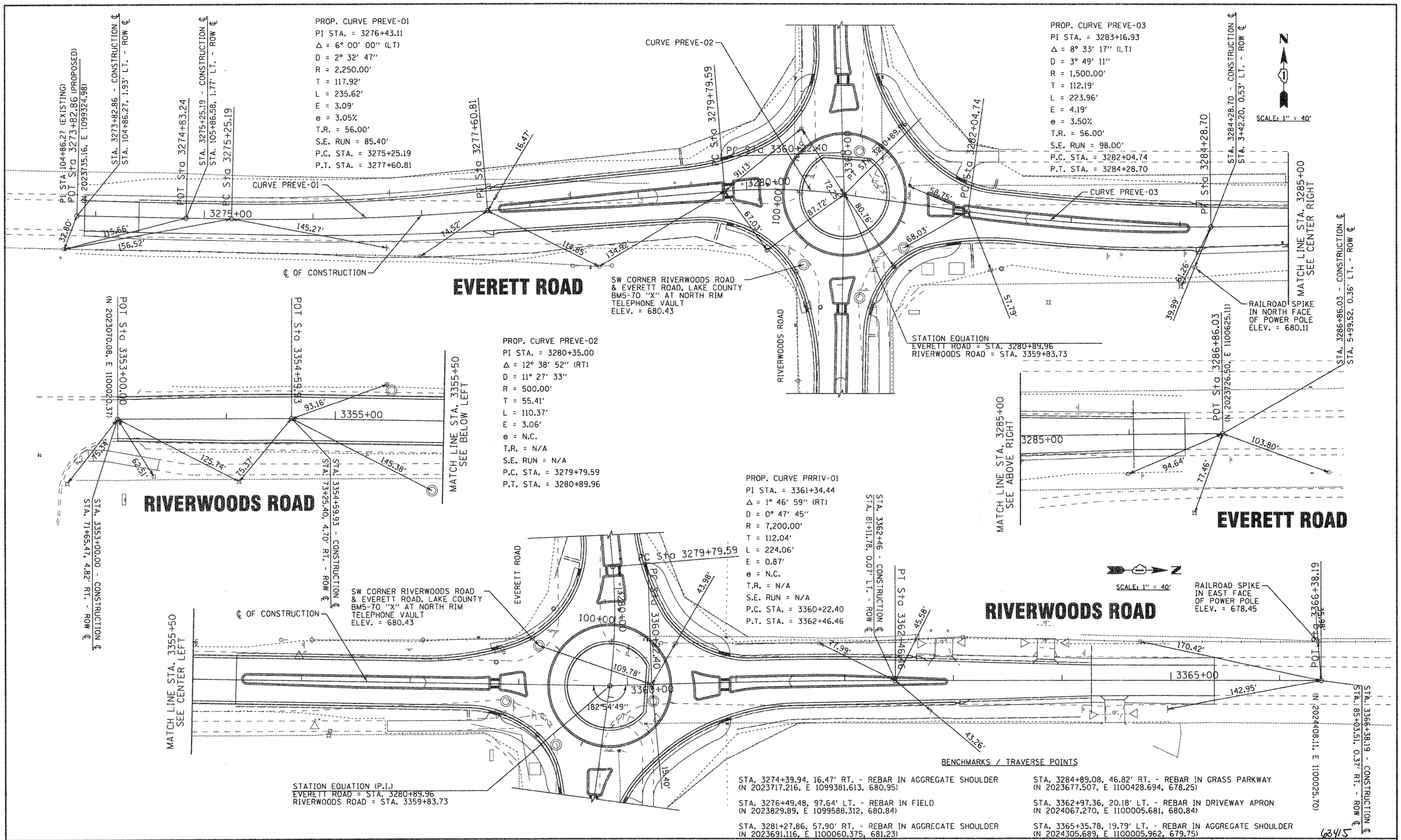
FILE NAME:

HDR Engineering, inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

SCHEDULE OF QUANTITIES

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	18	107



REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

LakeCounty
Division of Transportation

ALIGNMENT AND TIES

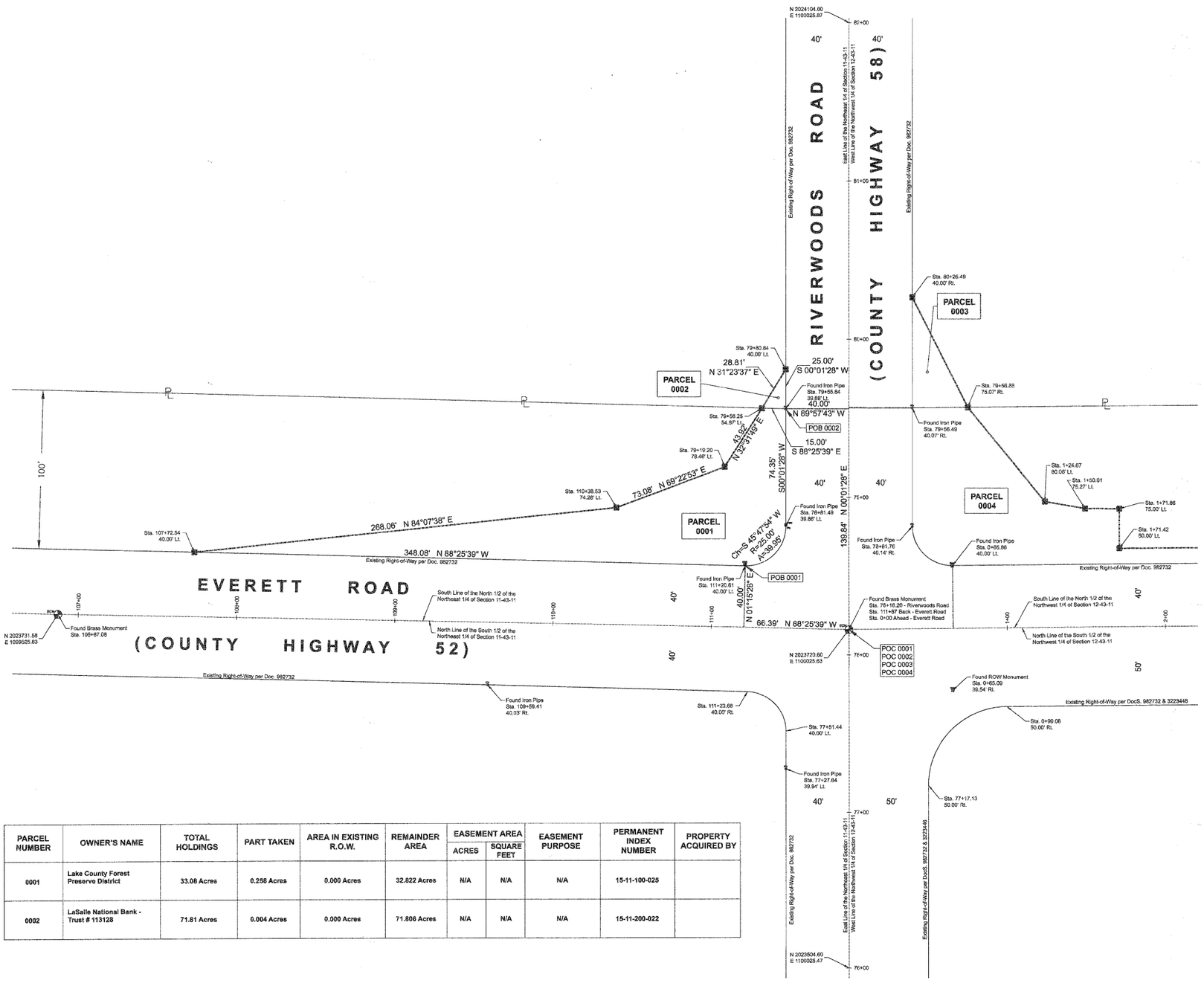
EVERETT ROAD AND RIVERWOODS ROAD

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	19	107

6345

FILE NAME:

PART OF THE NE 1/4 & NW 1/4 OF SECTIONS 11 & 12, TWP. 43 N., R. 11 E. OF 3rd. P.M., IN LAKE COUNTY, ILLINOIS.



LEGEND

SECTION CORNER

QUARTER SECTION CORNER

SECTION LINE
QUARTER SECTION LINE
QUARTER, QUARTER SECTION LINE
PLATTED LOT LINE
PROPERTY (DEED) LINE
APPARENT PROPERTY LINE
CENTERLINE
EXISTING RIGHT OF WAY LINE
PROPOSED RIGHT OF WAY LINE
PROPOSED EASEMENT

129.32'	MEASURED DIMENSION
129.32' (COMP)	COMPUTED DIMENSION
(129.32')	RECORDED DIMENSION
POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
	EXISTING BUILDING

GRAPHIC SCALE : NTS

Bearings are referenced to the Illinois Coordinate System, NAD83, East Zone, as provided by the Illinois Department of Transportation.

IRON PIPE OR ROD FOUND — "MAG" NAIL SET
CUT CROSS FOUND OR SET — 5/8" REBAR SET

T1 T2 T3 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYOR'S REGISTRATION NUMBER.

BT1 BT2 BT3 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYOR'S REGISTRATION NUMBER.

STAKING OF PROPOSED RIGHT OF WAY. SET SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYOR'S REGISTRATION NUMBER.

STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYOR'S REGISTRATION NUMBER.

PERMANENT SURVEY MARKER (TO BE SET BY OTHERS)

RIGHT OF WAY STAKING PROPOSED TO BE SET

PARCEL NUMBER	OWNER'S NAME	TOTAL HOLDINGS	PART TAKEN	AREA IN EXISTING R.O.W.	REMAINDER AREA	EASEMENT AREA ACRES	EASEMENT AREA SQUARE FEET	EASEMENT PURPOSE	PERMANENT INDEX NUMBER	PROPERTY ACQUIRED BY
0001	Lake County Forest Preserve District	33.08 Acres	0.258 Acres	0.000 Acres	32.822 Acres	N/A	N/A	N/A	15-11-100-025	
0002	LaSalle National Bank - Trust # 113128	71.81 Acres	0.004 Acres	0.000 Acres	71.806 Acres	N/A	N/A	N/A	15-11-200-022	

634/15

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

LakeCounty Division of Transportation

RIGHT-OF-WAY

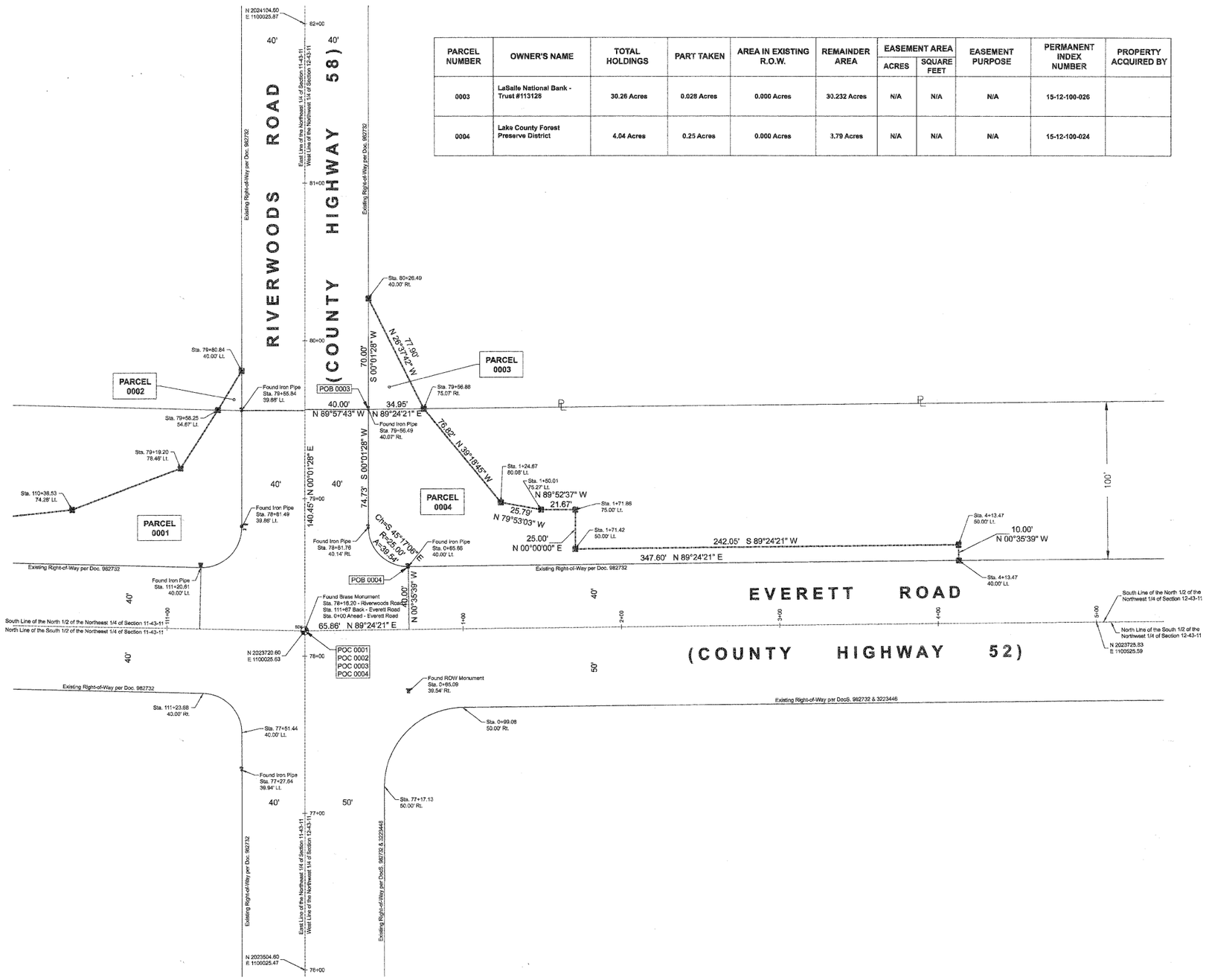
EVERETT ROAD AND RIVERWOODS ROAD

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	20	107

FILE NAME:

PART OF THE NE 1/4 & NW 1/4 OF SECTIONS 11 & 12, TWP. 43 N., R. 11 E. OF 3rd. P.M., IN LAKE COUNTY, ILLINOIS.

PARCEL NUMBER	OWNER'S NAME	TOTAL HOLDINGS	PART TAKEN	AREA IN EXISTING R.O.W.	REMAINDER AREA	EASEMENT AREA		EASEMENT PURPOSE	PERMANENT INDEX NUMBER	PROPERTY ACQUIRED BY
						ACRES	SQUARE FEET			
0003	LaSalle National Bank - Trust #113126	30.26 Acres	0.028 Acres	0.000 Acres	30.232 Acres	N/A	N/A	N/A	15-12-100-026	
0004	Lake County Forest Preserve District	4.04 Acres	0.25 Acres	0.000 Acres	3.79 Acres	N/A	N/A	N/A	15-12-100-024	



LEGEND

SECTION CORNER

QUARTER SECTION CORNER

SECTION LINE
QUARTER SECTION LINE
QUARTER, QUARTER SECTION LINE
PLATTED LOT LINE
PROPERTY (DEED) LINE
APPARENT PROPERTY LINE
CENTERLINE
EXISTING RIGHT OF WAY LINE
PROPOSED RIGHT OF WAY LINE
PROPOSED EASEMENT
129.32' MEASURED DIMENSION
129.32' (COMP) COMPUTED DIMENSION
(129.32') RECORDED DIMENSION
POB POINT OF BEGINNING
POC POINT OF COMMENCEMENT
EXISTING BUILDING

GRAPHIC SCALE : NTS

Bearings are referenced to the Illinois Coordinate System, NAD83, East Zone, as provided by the Illinois Department of Transportation.

IRON PIPE OR ROD FOUND
"MAG" NAIL SET
CUT CROSS FOUND OR SET
5/8" REBAR SET

T1 T2 T3 **THESE STAKES REFERENCE FOUND OR SET MONUMENTATION.** SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYOR'S REGISTRATION NUMBER.

BT1 BT2 BT3 **THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION.** BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYOR'S REGISTRATION NUMBER.

STAKING OF PROPOSED RIGHT OF WAY. SET SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYOR'S REGISTRATION NUMBER.

M **STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS.** BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYOR'S REGISTRATION NUMBER.

PERMANENT SURVEY MARKER (TO BE SET BY OTHERS)

RIGHT OF WAY STAKING PROPOSED TO BE SET

6/24/15

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

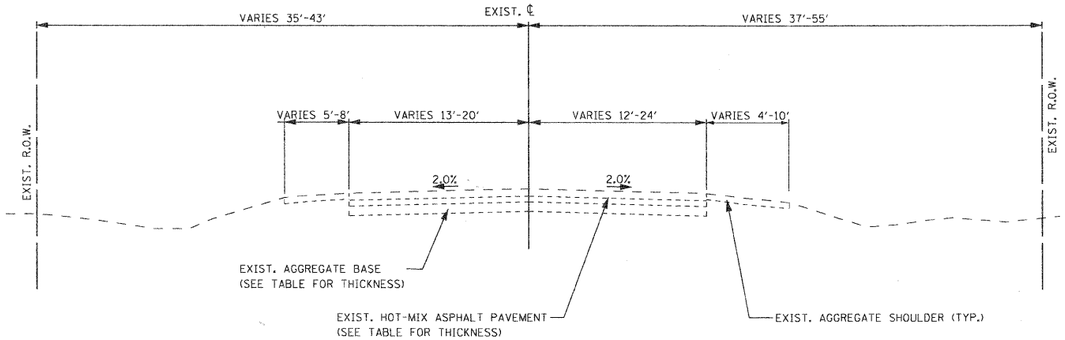
LakeCounty Division of Transportation

RIGHT-OF-WAY

EVERETT ROAD AND RIVERWOODS ROAD

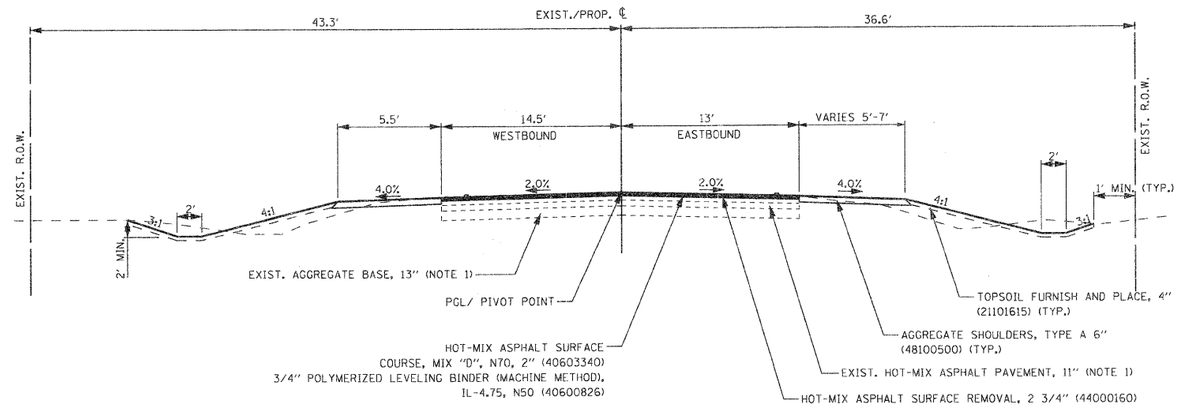
ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	21	107

FILE NAME:



EXISTING EVERETT ROAD AND RIVERWOODS ROAD

EXISTING PAVEMENT THICKNESS		
LOCATION	APPROX. ASPHALT THICKNESS	APPROX. AGGREGATE THICKNESS
Everett W Leg	11"	13"
Everett E Leg	11"	9"
Riverwoods S Leg	10.5"	12"
Riverwoods N Leg	13.25"	11"



PROPOSED EVERETT ROAD

STA. 3273+90 TO STA. 3274+40

FLEXIBLE PAVEMENT DESIGN:

RIVERWOODS ROAD:

DATE = 08/19/2009
PROJECT = RIVERWOODS ROAD AT EVERETT ROAD ROUNDABOUT
YEAR OF ADT = 2008
ADT = 10800
ANNUAL GROWTH PERCENTAGE (NON-COMPOUNDED) = 3%
GROWTH = 3% PER YEAR x 1/2 DESIGN PERIOD x ADT = 3888
SPECIAL ADJUSTMENTS FOR KNOWN DEVELOPMENT, ETC. = 0
DESIGN PERIOD IN YEARS = 20
CONSTRUCTION YEAR = 2010
STRUCTURAL DESIGN TRAFFIC (SDT) = 14688
PC = 96.40% = 14159
SU = 3.10% = 455
MU = 0.50% = 73
LOAD LIMIT (73,280 STANDARD) OR 80,000 = 80,000
CLASS ROAD (1,2,3,4) = 2
SUBGRADE SUPPORT RATING = POOR
DESIGN TRAFFIC FACTOR (TF) = 0.81
SELECTED DESIGN AC TYPE = PG64-22
DESIGN AC MIXTURE TEMPERATURE (DEGREES F) = 76
DESIGN HOT-MIX ASPHALT CONCRETE MODULUS = 650
DESIGN AC MICROSTRAIN = 115
PAVEMENT THICKNESS REQUIRED (INCHES) = 9
SUBGRADE = 12

EVERETT ROAD:

DATE = 08/19/2009
PROJECT = RIVERWOODS ROAD AT EVERETT ROAD ROUNDABOUT
YEAR OF ADT = 2008
ADT = 6750
ANNUAL GROWTH PERCENTAGE (NON-COMPOUNDED) = 3%
GROWTH = 3% PER YEAR x 1/2 DESIGN PERIOD x ADT = 2430
SPECIAL ADJUSTMENTS FOR KNOWN DEVELOPMENT, ETC. = 0
DESIGN PERIOD IN YEARS = 20
CONSTRUCTION YEAR = 2010
STRUCTURAL DESIGN TRAFFIC (SDT) = 9180
PC = 98.30% = 9024
SU = 1.50% = 138
MU = 0.20% = 18
LOAD LIMIT (73,280 STANDARD) OR 80,000 = 80,000
CLASS ROAD (1,2,3,4) = 2
SUBGRADE SUPPORT RATING = POOR
DESIGN TRAFFIC FACTOR (TF) = 0.24
SELECTED DESIGN AC TYPE = PG64-22
DESIGN AC MIXTURE TEMPERATURE (DEGREES F) = 76
DESIGN HOT-MIX ASPHALT CONCRETE MODULUS = 650
DESIGN AC MICROSTRAIN = 230
PAVEMENT THICKNESS REQUIRED (INCHES) = 6
SUBGRADE = 12

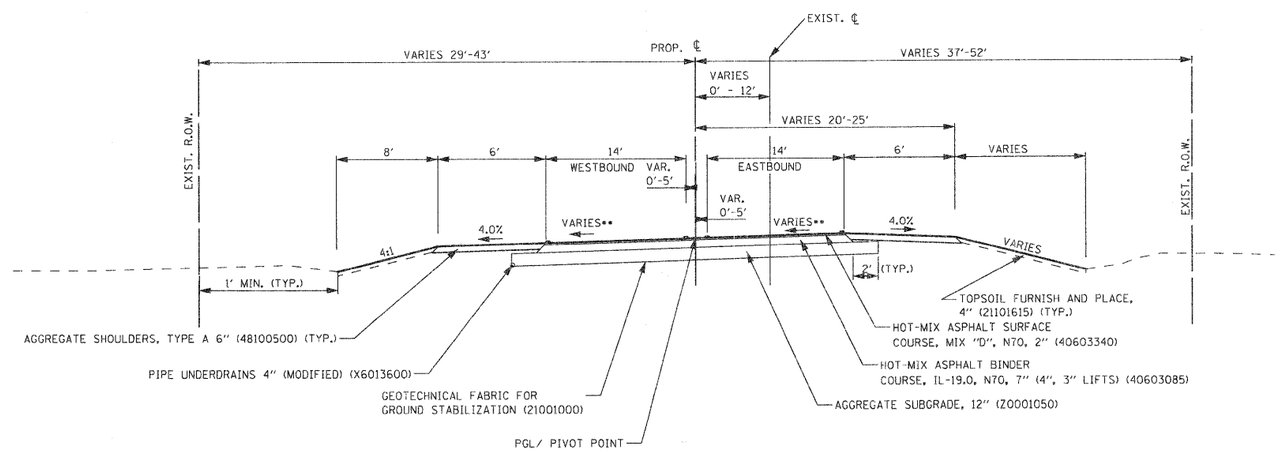
NOTE: RIVERWOODS ROAD PAVEMENT DESIGN WILL BE USED THROUGHOUT THE PROJECT.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @ Ndes
PAVEMENT RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm)	4% @ 70 Gyr.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	4% @ 50 Gyr.
FULL DEPTH PAVEMENT	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm)	4% @ 70 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	4% @ 70 Gyr.
TEMPORARY PAVEMENT	
TEMP PAVEMENT (HMA BINDER IL-19 mm); 8"	4% @ 50 Gyr.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" 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 DISTRICT ONE SPECIAL PROVISIONS.

CONTRACTOR SHALL MILL BEFORE PATCHING.



PROPOSED EVERETT ROAD

STA. 3274+40 TO STA. 3277+71

NOTES:

1. APPROXIMATE AGGREGATE AND ASPHALT THICKNESSES ON WEST LEG OF EVERETT ROAD.

** VARIES FROM 2.0% TO 3.05%. SEE CROSS SECTIONS FOR SPECIFIC RATES.

63415

- DENOTES PAVEMENT MARKING. SEE MARKING PLAN FOR TYPE.

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

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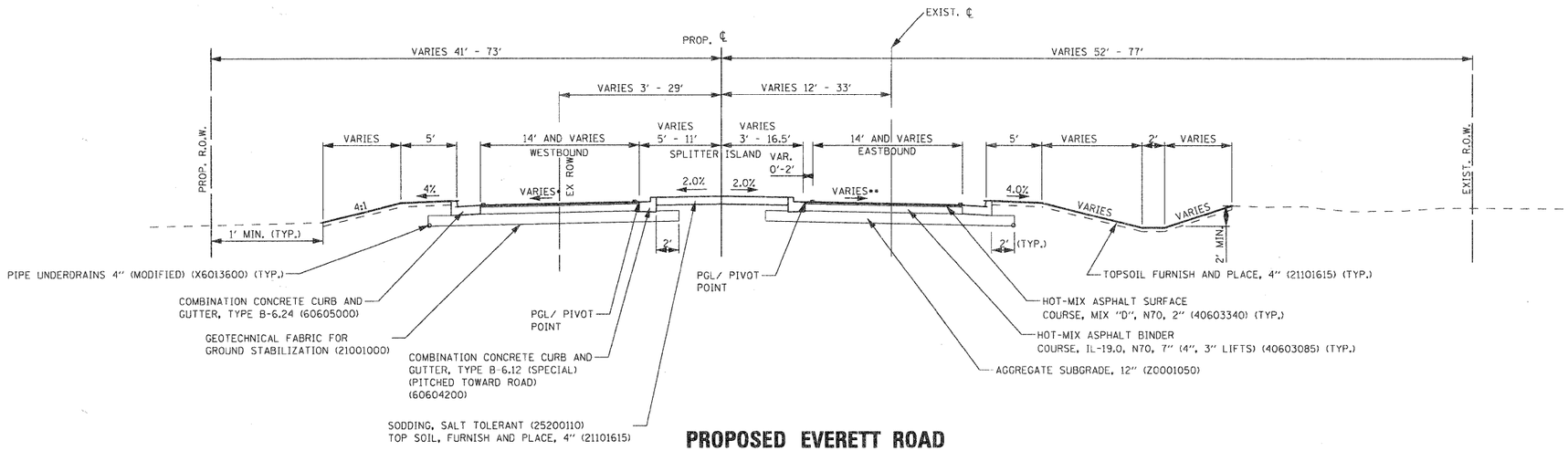
LakeCounty Division of Transportation

EVERETT ROAD
TYPICAL SECTIONS

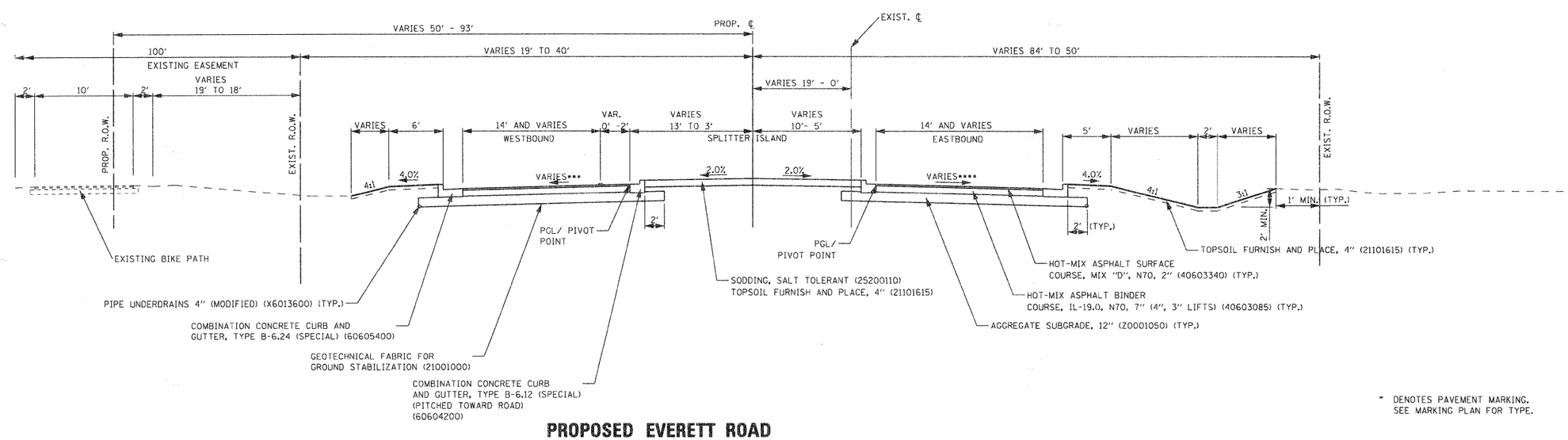
ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	22	107

FILE NAME:



PROPOSED EVERETT ROAD
STA. 3277+71 TO STA. 3280+12

STA. 3280+12 TO STA. 3281+67: SEE PLAN AND PROFILE SHEETS AND OTHER PLAN DETAILS FOR MORE INFORMATION



PROPOSED EVERETT ROAD
STA. 3281+67 TO STA. 3284+09

NOTE:

- * VARIES FROM 2.0% TO 0.75%.
- ** VARIES FROM -1.67% TO 0.75%.
- *** VARIES FROM 2.0% TO 3.50%.
- **** VARIES FROM 0.35% TO -3.50%.

SEE CROSS SECTIONS FOR SPECIFIC RATES.

" DENOTES PAVEMENT MARKING. SEE MARKING PLAN FOR TYPE.

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

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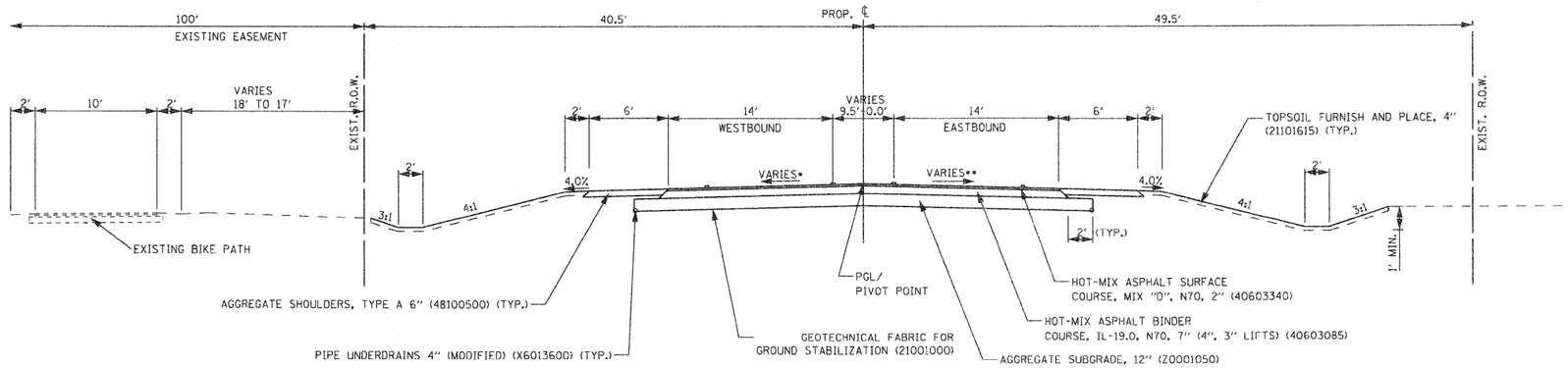
LakeCounty Division of Transportation

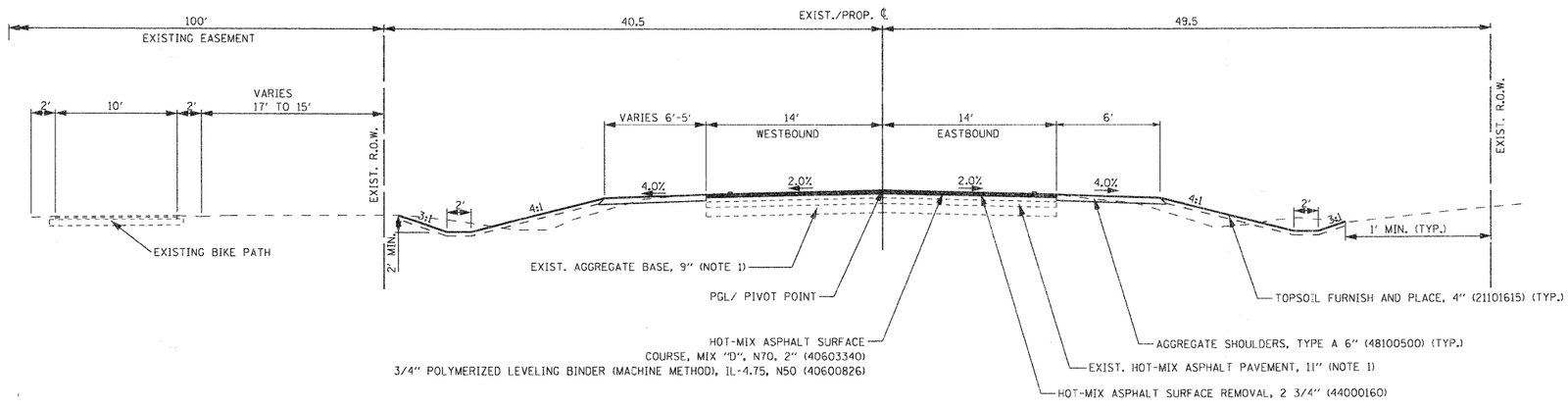
EVERETT ROAD
TYPICAL SECTIONS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	23	107

FILE NAME:



PROPOSED EVERETT ROAD
STA. 3284+09 TO STA. 3286+04



PROPOSED EVERETT ROAD
STA. 3286+04 TO STA. 3286+51.41

* DENOTES PAVEMENT MARKING.
SEE MARKING PLAN FOR TYPE.

NOTES:

1. APPROXIMATE AGGREGATE AND ASPHALT THICKNESSES ON EAST LEG OF EVERETT ROAD.

* VARIES FROM 3.03% TO 2.0%.
** VARIES FROM -3.03% TO 2.0%.
SEE CROSS SECTIONS FOR SPECIFIC RATES.

63415

REVISIONS / REMARKS					
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		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

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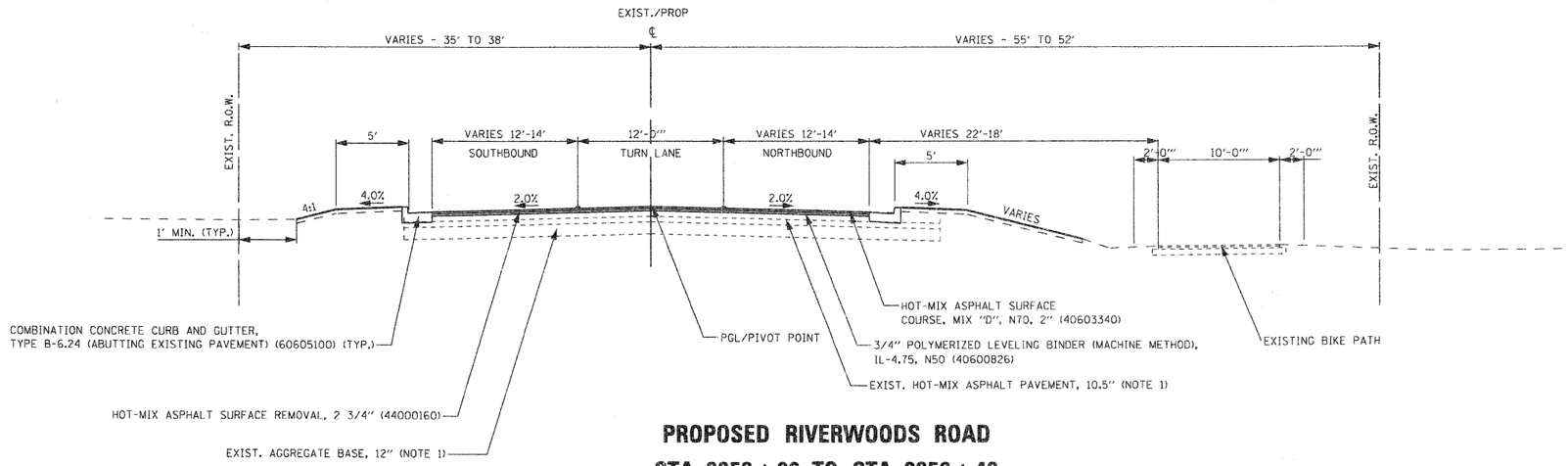
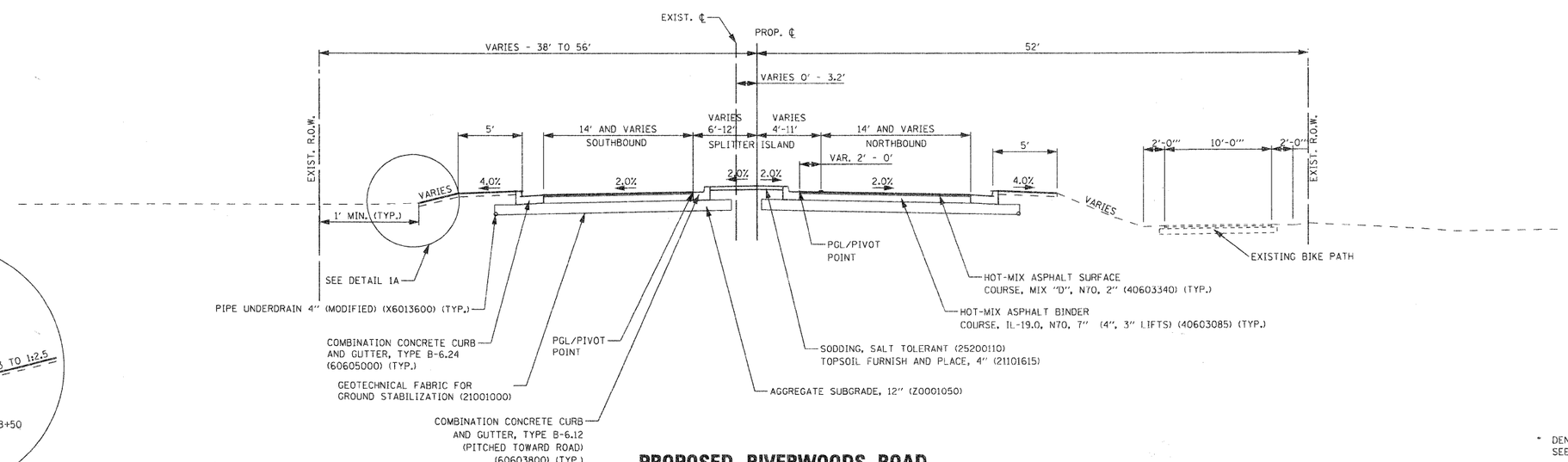
LakeCounty
Division of Transportation

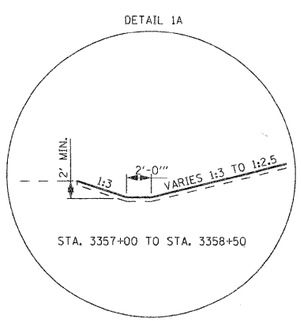
EVERETT ROAD	ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
TYPICAL SECTIONS	CH	136	04-00136-06-CH	24	107

FILE NAME:



PROPOSED RIVERWOODS ROAD
STA. 3353+00 TO STA. 3356+40





PROPOSED RIVERWOODS ROAD
STA. 3356+40 TO STA. 3359+07

* DENOTES PAVEMENT MARKING.
SEE MARKING PLAN FOR TYPE.

NOTES:

1. APPROXIMATE AGGREGATE AND ASPHALT THICKNESSES ON SOUTH LEG OF RIVERWOODS ROAD.

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

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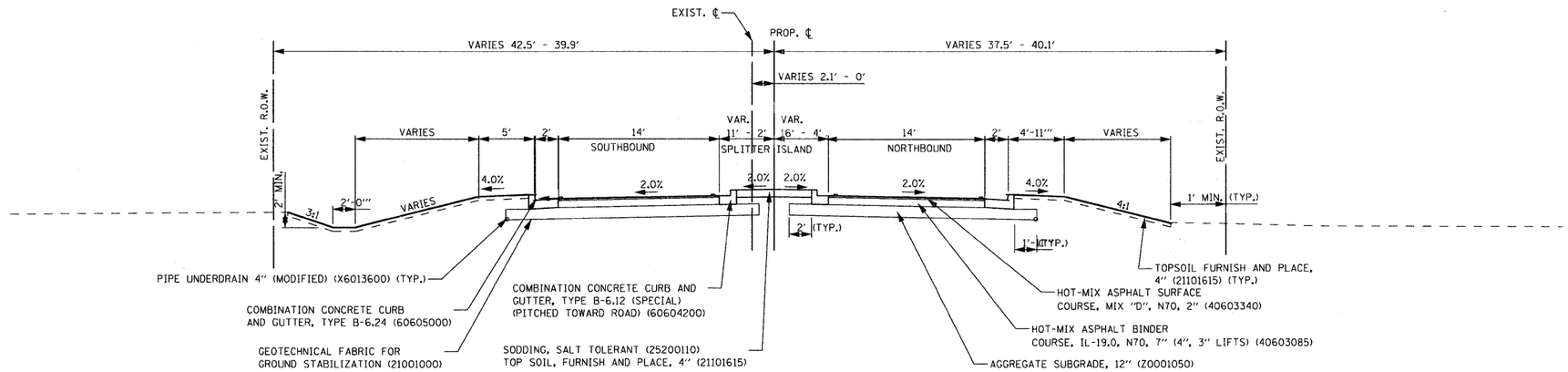
LakeCounty
Division of Transportation

RIVERWOODS ROAD
TYPICAL SECTIONS

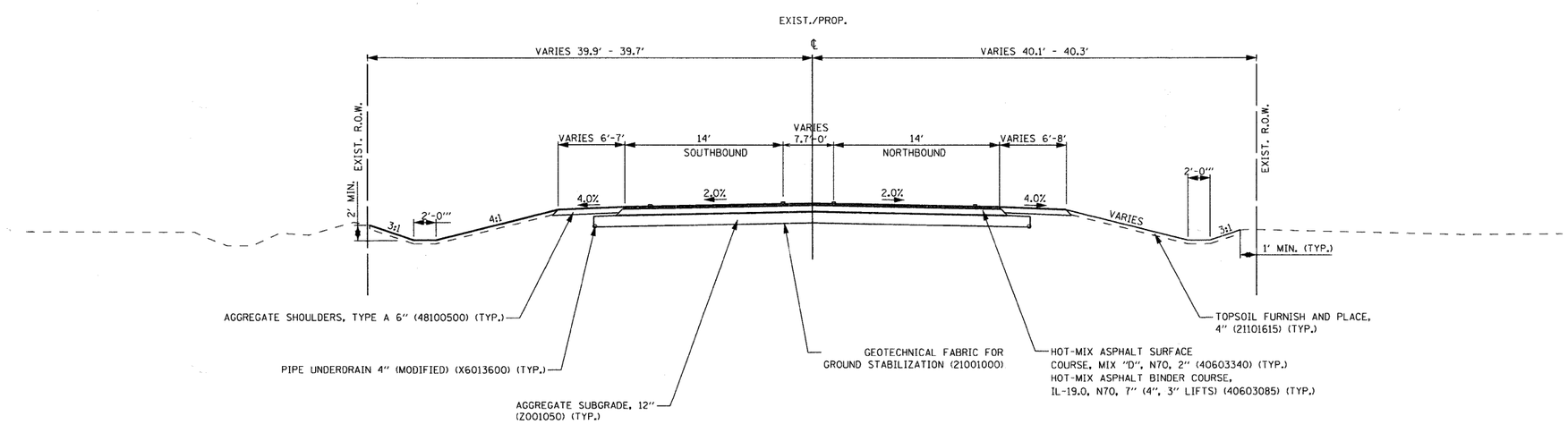
ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	25	107

FILE NAME:



PROPOSED RIVERWOODS ROAD
STA. 3360+61 TO STA. 3362+94

STA. 3359+07 TO STA. 3360+61: SEE PLAN AND PROFILE SHEETS AND OTHER PLAN DETAILS FOR MORE INFORMATION



PROPOSED RIVERWOODS ROAD
STA. 3362+94 TO STA. 3364+27

* DENOTES PAVEMENT MARKING. SEE MARKING PLAN FOR TYPE.

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

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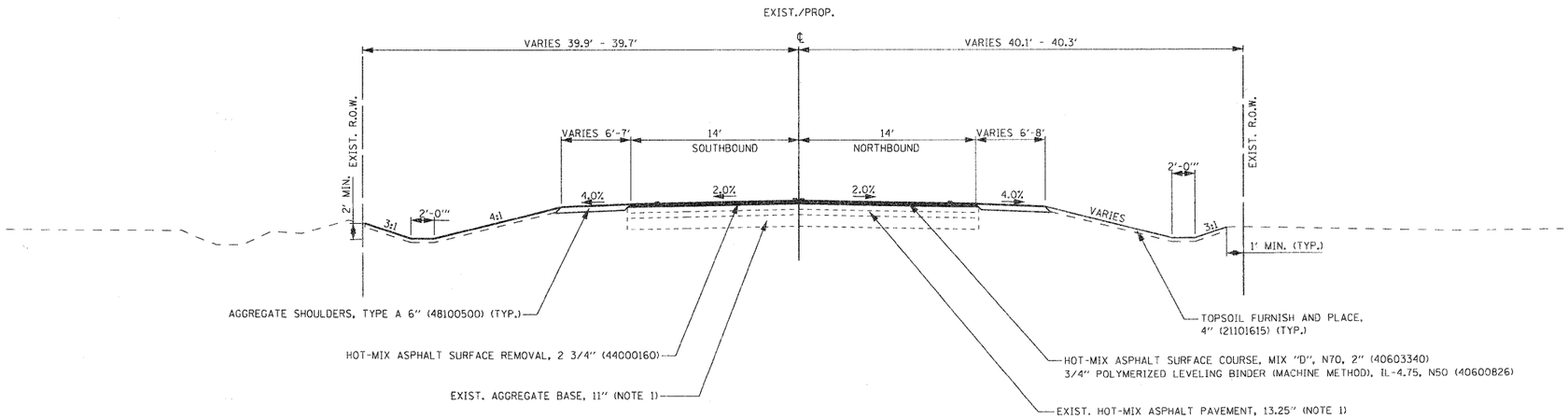
LakeCounty Division of Transportation

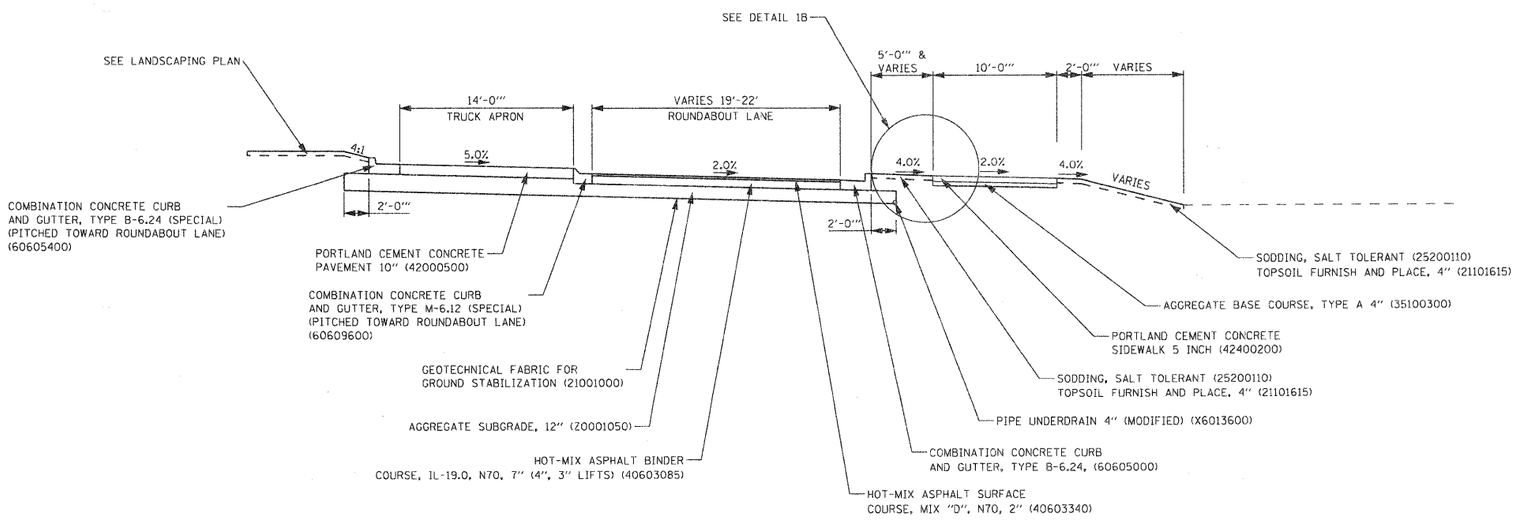
RIVERWOODS ROAD
TYPICAL SECTIONS

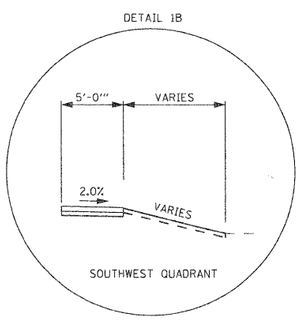
ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	26	107

FILE NAME:



PROPOSED RIVERWOODS ROAD
STA. 3364+27 TO STA. 3365+40





ROUNDABOUT
PROPOSED TYPICAL SECTION
STA. 100+00 TO STA. 103+58

* DENOTES PAVEMENT MARKING. SEE MARKING PLAN FOR TYPE.

NOTES:

1. APPROXIMATE AGGREGATE AND ASPHALT THICKNESSES ON NORTH LEG OF RIVERWOODS ROAD.

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

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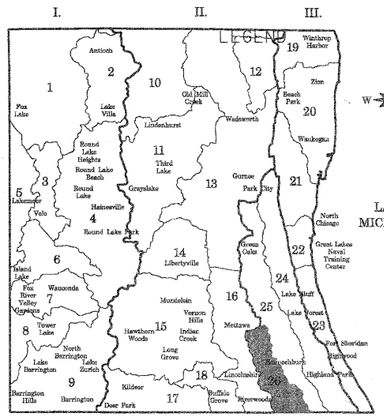
LakeCounty Division of Transportation

RIVERWOODS ROAD /ROUNDABOUT
TYPICAL SECTIONS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	27	107

FILE NAME:

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

THIS PROJECT DISTURBS 7.45 ACRES OF TOTAL LAND AREA. COMPLIANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER PERMIT IS NECESSARY IF A PROJECT DISTURBS 1 OR MORE ACRES OF TOTAL LAND AREA; AN NPDES STORMWATER PERMIT WILL BE REQUIRED FOR THIS PROJECT.

GENERAL NOTES FOR SOIL EROSION CONTROL

1. PERIMETER EROSION BARRIER SHALL BE INSTALLED AT LOCATIONS SPECIFIED IN THE PLANS OUTSIDE THE TOE OF SLOPE OR INSIDE THE RIGHT-OF-WAY WHICHEVER IS CLOSER TO THE CENTERLINE, OR AS DIRECTED BY THE ENGINEER PRIOR TO THE START OF ANY EARTHWORK, CULVERT, OR STORM SEWER CONSTRUCTION.

2. THE PERIMETER EROSION BARRIER SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED WITH VEGETATION. AT THIS TIME, THE PERIMETER EROSION BARRIER SHALL BE REMOVED AND AREAS DAMAGED BY THE PERIMETER EROSION BARRIER REMOVAL SHALL BE RESTORED. THE RESTORATION OF THE AREA DISTURBED BY THE PERIMETER EROSION BARRIER REMOVAL SHALL BE INCLUDED IN THE PAY ITEM OF PERIMETER EROSION BARRIER.

3. THE INSTALLATION & REMOVAL OF PERIMETER EROSION BARRIER SHALL BE PAID FOR UNDER THE ITEM OF PERIMETER EROSION BARRIER. MAINTENANCE OF PERIMETER EROSION BARRIER SHALL BE PAID FOR UNDER THE ITEM OF MAINTENANCE OF TEMPORARY EROSION CONTROL SYSTEMS.

4. TEMPORARY DITCH CHECKS SHALL BE CONSTRUCTED AS PER THE STANDARD DETAIL INCLUDED IN THE PLANS AS SHOWN HEREON OR AS DIRECTED BY THE ENGINEER. THE DITCH CHECKS SHALL BE INSTALLED AS GRADING PROGRESSES THROUGH THE PROJECT.

5. ALL DISTURBED AREAS SHALL BE SEEDED/SODDED AS SOON AS PRACTICAL AFTER CONSTRUCTION IN THAT AREA HAS CONCLUDED.

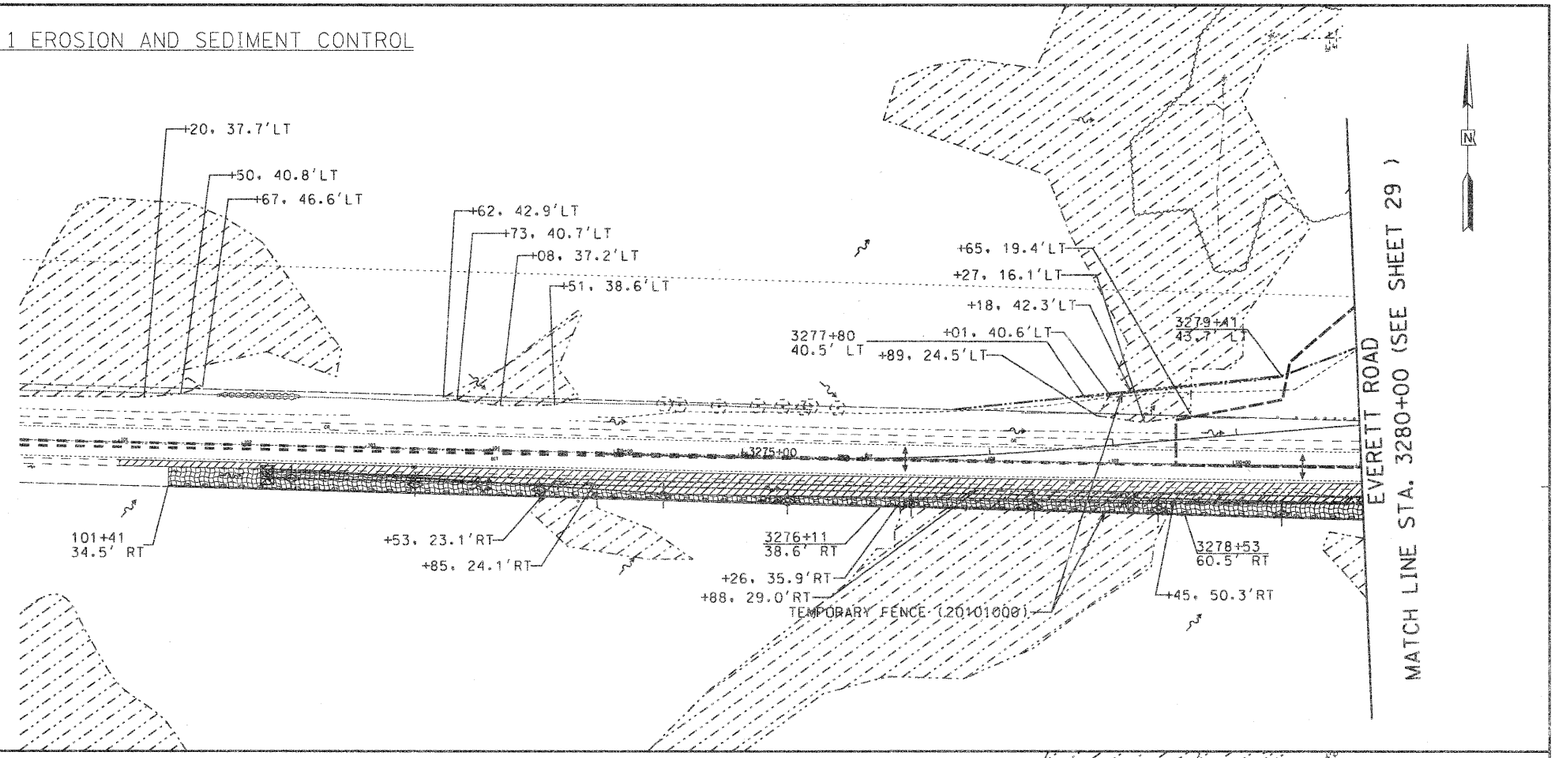
6. ALL SEEDED AREAS SHALL BE COVERED WITH EROSION CONTROL BLANKET.

7. FOR PERMANENT SEEDING, SEE PAVEMENT MARKING AND LANDSCAPE PLAN.

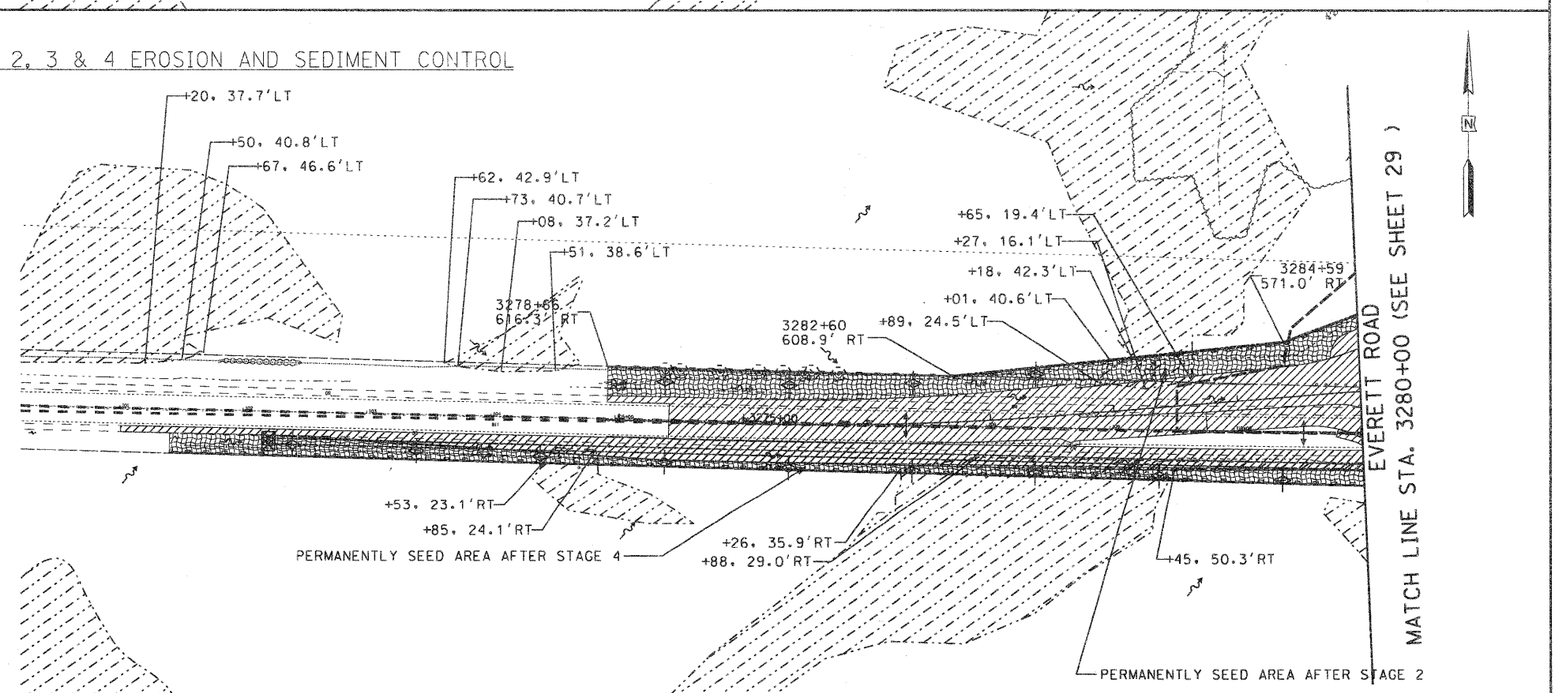
LEGEND

- DRAINAGE DIRECTION
- TEMPORARY EROSION CONTROL SEEDING (28000250) AND EROSION CONTROL BLANKET (25100630)
- INLET AND PIPE PROTECTION, SPECIAL (X2800500)
- INLET FILTERS (28000510)
- TEMPORARY DITCH CHECKS, URETHANE FOAM/GEOTEXTILE (X2800105)
- PERIMETER EROSION BARRIER (28000400)
- DRAINAGE DIVIDES
- LIMITS OF CONSTRUCTION
- WORK ZONE
- WETLANDS

STAGE 1 EROSION AND SEDIMENT CONTROL



STAGES 2, 3 & 4 EROSION AND SEDIMENT CONTROL



REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALE 0 60 120

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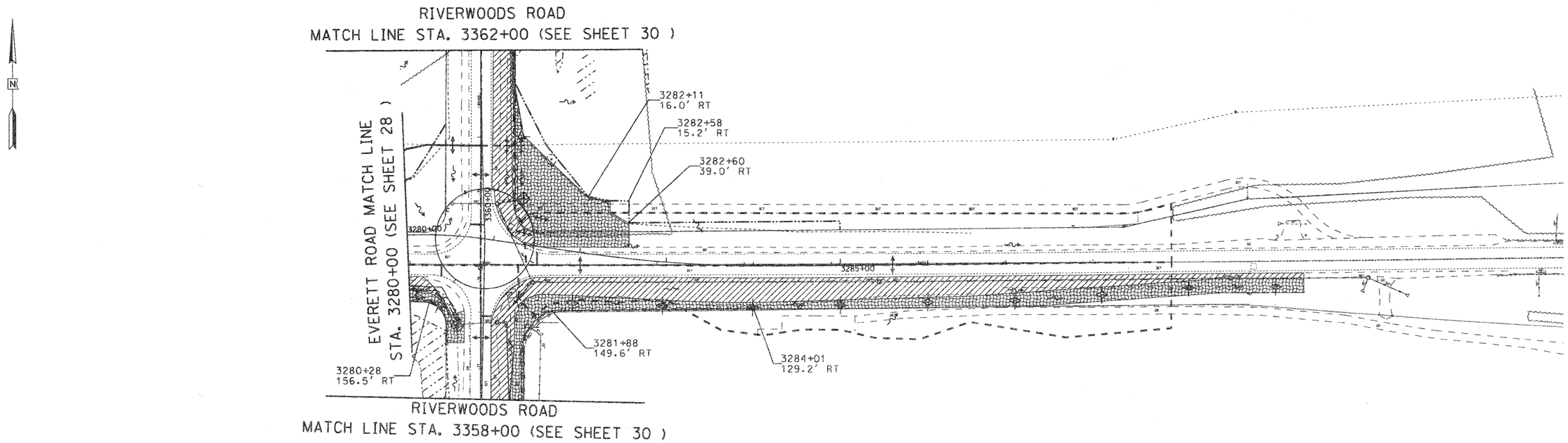
LakeCounty Division of Transportation

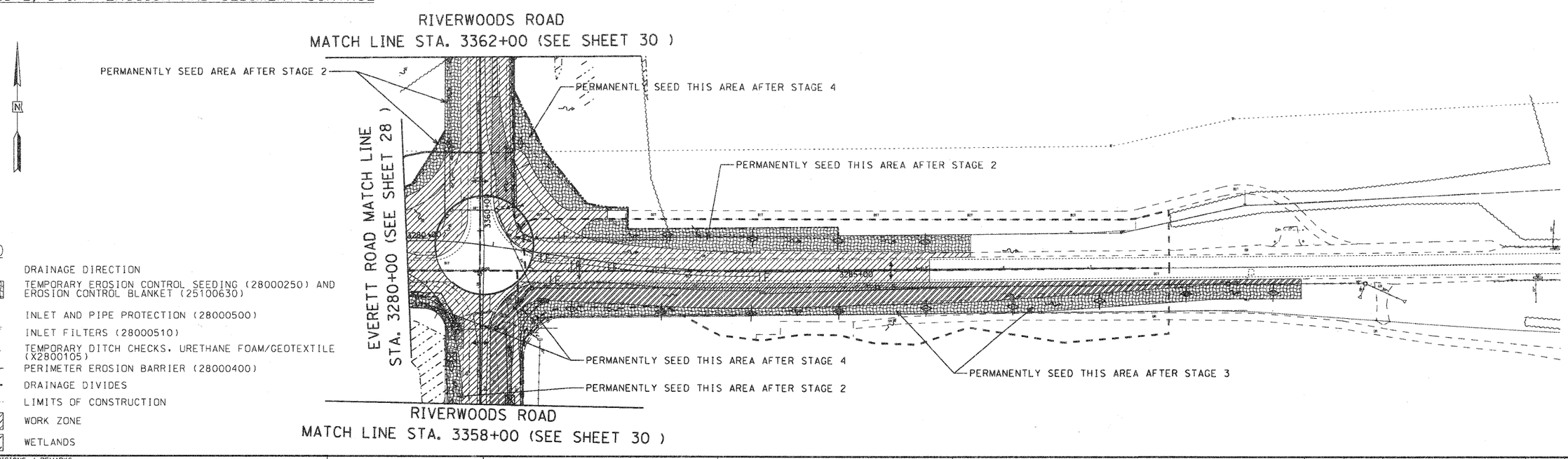
EROSION CONTROL AND SEDIMENT CONTROL	ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
EVERETT ROAD STAGES 1 - 4	CH	136	04-00136-06-CH	28	107

FILE NAME:

STAGE 1 EROSION AND SEDIMENT CONTROL



STAGES 2, 3 & 4 EROSION AND SEDIMENT CONTROL



LEGEND

- DRAINAGE DIRECTION
- TEMPORARY EROSION CONTROL SEEDING (28000250) AND EROSION CONTROL BLANKET (25100630)
- INLET AND PIPE PROTECTION (28000500)
- INLET FILTERS (28000510)
- TEMPORARY DITCH CHECKS, URETHANE FOAM/GEOTEXTILE (X2800105)
- PERIMETER EROSION BARRIER (28000400)
- DRAINAGE DIVIDES
- LIMITS OF CONSTRUCTION
- WORK ZONE
- WETLANDS

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALE 0 60 120

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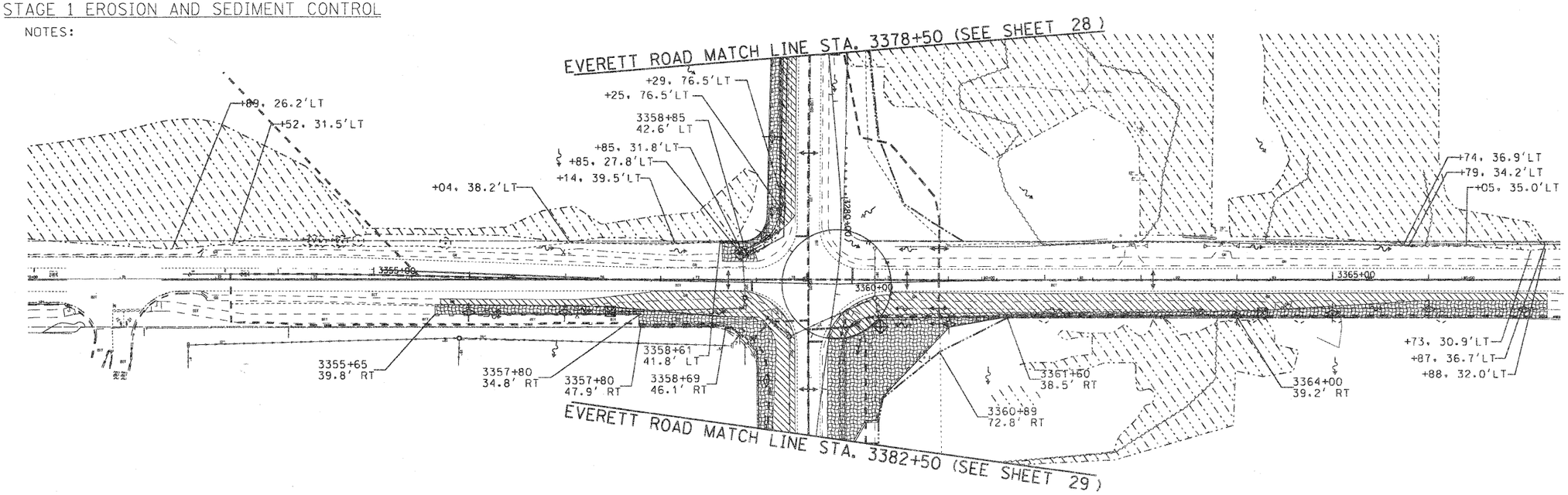
LakeCounty Division of Transportation

EROSION CONTROL AND SEDIMENT CONTROL	ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
EVERETT ROAD STAGES 1 – 4	CH	136	04-00136-06-CH	29	107

FILE NAME:

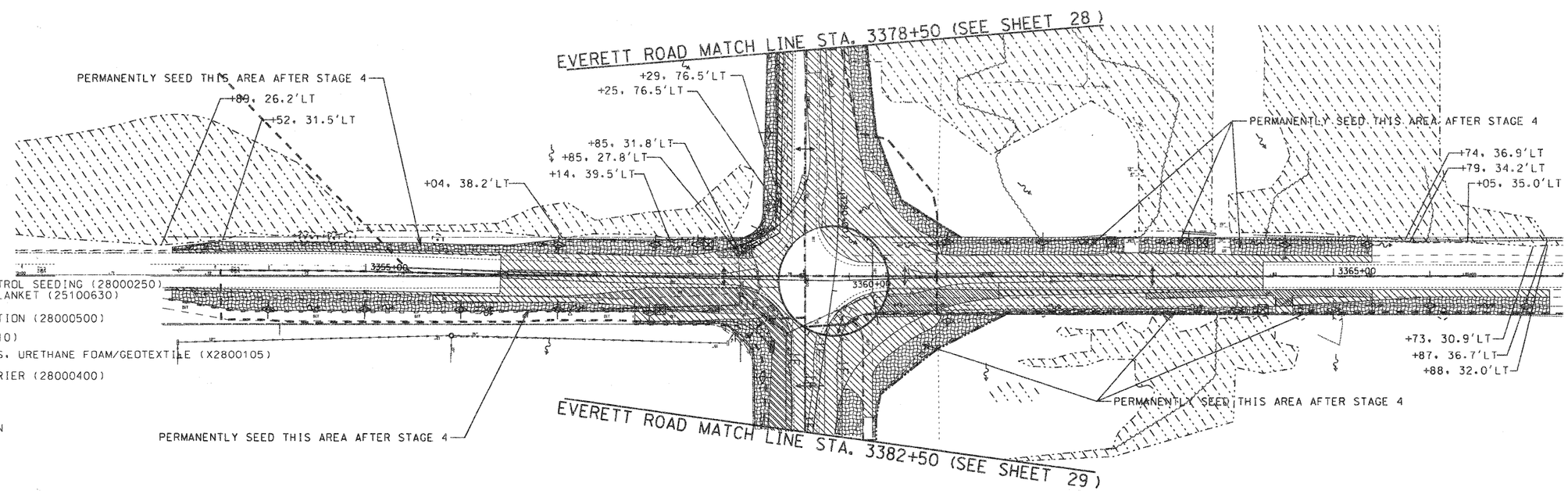
STAGE 1 EROSION AND SEDIMENT CONTROL

NOTES:



STAGES 2, 3 & 4 EROSION AND SEDIMENT CONTROL

NOTES:



LEGEND

- DRAINAGE DIRECTION
- TEMPORARY EROSION CONTROL SEEDING (28000250) AND EROSION CONTROL BLANKET (25100630)
- INLET AND PIPE PROTECTION (28000500)
- INLET FILTERS (28000510)
- TEMPORARY DITCH CHECKS, URETHANE FOAM/GEOTEXTILE (X2800105)
- PERIMETER EROSION BARRIER (28000400)
- DRAINAGE DIVIDES
- LIMITS OF CONSTRUCTION
- WORK ZONE
- WETLANDS

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALE 0 60 120

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LakeCounty Division of Transportation

EROSION CONTROL AND SEDIMENT CONTROL	ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
RIVERWOODS ROAD STAGES 1 – 4	CH	136	04-00136-06-CH	30	107

FILE NAME:

EVERETT ROAD & RIVERWOODS ROAD ROUNDABOUT

TRAFFIC CONTROL AND PROTECTION GENERAL NOTES

1. APPLICABLE STANDARDS

701001-02 OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701006-03 OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701011-02 OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701301-03 LANE CLOSURE, 2L, 2W, SHORT TERM OPERATIONS
701306-02 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY FOR SPEEDS >= 45 MPH
701311-03 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS-DAY ONLY
701331-03 LANE CLOSURE, 2L, 2W, WITH RUN-AROUND FOR SPEEDS >= 45 MPH
701501-05 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-06 URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04 LANE CLOSURE, MULTILANE, 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01 TRAFFIC CONTROL DEVICES
704001-06 TEMPORARY CONCRETE BARRIER
720001-01 SIGN PANEL MOUNTING DETAILS
720006-02 SIGN PANEL ERECTION DETAILS
720011-01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
728001-01 TELESCOPING STEEL SIGN SUPPORT

APPLICABLE DETAILS

LC7200 DIRECTION INDICATOR BARRICADES
LC7202 SHOULDER CLOSURE AND TAPER FOR CHANGEABLE MESSAGE SIGN

2. The permanent traffic control depicted hereon is the minimum requirement. Additional traffic control devices as specified by the above Highway Standards and the Special Provisions shall be placed by the contractor to the satisfaction of the engineer. All traffic control devices shall be included in the cost of the lump sum pay item "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)" unless otherwise indicated in the plans or special provisions.

3. All traffic control warning signs and associated signing mounted with the warning signs shall have black legends and borders on fluorescent orange reflective sheeting.

4. All construction signs, barricades and other devices required to control traffic shall be furnished, installed and maintained by the contractor.

5. All traffic control devices shall be removed, covered or turned away from traffic immediately when they are no longer necessary. When a sign is covered, the post shall have a reflective 3 inch x 6 inch delineator installed.

6. The sign spacing for the above Highway Standards shall be in accordance with the Sign Spacing Table shown herein this Traffic Control Plan.

7. Road name plates shall be installed on the "ROAD WORK AHEAD" signs at the intersections shown in this Traffic Control Plan. The road name plates shall be 9 inch blanks with 6 inch uppercase and 5 inch lowercase lettering. The road name plates shall be furnished by the contractor.

8. "ROAD WORK AHEAD" signs shall be equipped with mono-directional Type A amber flashing lights.

9. CONSTRUCTION MUST BE STAGED IN ORDER TO MAINTAIN ACCESS TO PEDESTRIAN/BIKE PATH. The cost of this work is included in the lump sum pay item "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)" and no additonal compensation will be allowed.

10. PROPER PROTECTION MUST BE PROVIDED TO ENSURE SAFETY OF PEDESTRIANS AND BICYCLISTS DURING CONSTRUCTION.

TAPER RATE TABLE		
LEG	POSTED SPEED	TAPER RATE
NORTH, WEST, EAST	45 MPH	25:1
SOUTH	40 MPH	15:1

POSTED SPEED LIMIT
EVERETT ROAD - 45 MPH
RIVERWOODS ROAD - 45 MPH (NORTH LEG)
RIVERWOODS ROAD - 40 MPH (SOUTH LEG)

ADVANCE WARNING SIGN SPACING TABLE

POSTED SPEED	DISTANCE BETWEEN SIGNS	
	A	B
40 MPH OR LESS	400 FT.	200 FT.
45-50 MPH	400 FT.	350 FT.
55 MPH	500 FT.	500 FT.

[ ] DENOTES ITEMS AND WORK NOT PAID FOR SEPARATELY

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALE 0 40 80

HDR Engineering, Inc. 30 N LaSalle Street, Suite 3220 Chicago, IL 60602 312-443-4900

LakeCounty Division of Transportation

GENERAL NOTES
TRAFFIC CONTROL PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	31	107

FILE NAME: $FILE$

TRAFFIC CONTROL GENERAL NOTES

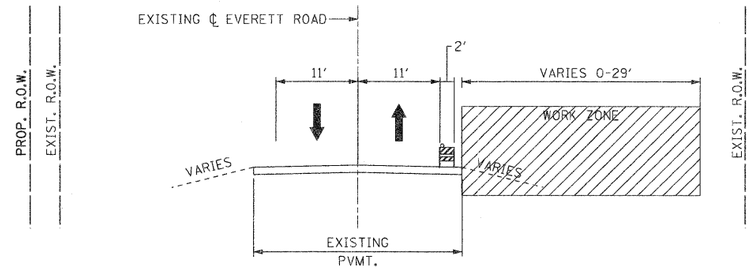
PRESTAGE

CONSTRUCTION:
1. CONTRACTOR TO CONSTRUCT IRRIGATION SYSTEM AS OUTLINED ON PAGE 62 . CONTRACTOR TO USE STANDARD 701306-02 FOR TRAFFIC CONTROL.

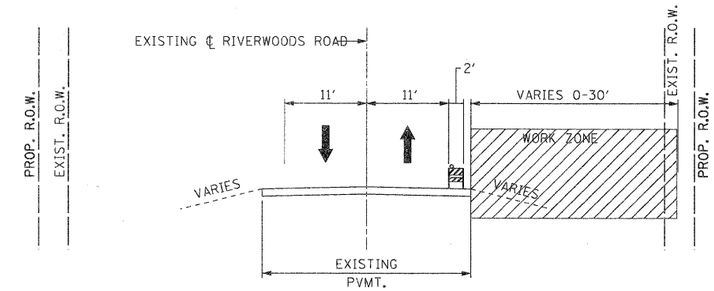
STAGE 1

CONSTRUCTION:
1. CONSTRUCT TEMPORARY PAVEMENT ON SOUTH SIDE OF EVERETT ROAD.
2. CONSTRUCT TEMPORARY PAVEMENT ON EAST SIDE OF RIVERWOODS ROAD.

TRAFFIC:
1. INTERSECTION WILL OPERATE AS A STOP CONTROLLED INTERSECTION.
2. MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION AT ALL TIMES.



EVERETT ROAD
STAGE 1



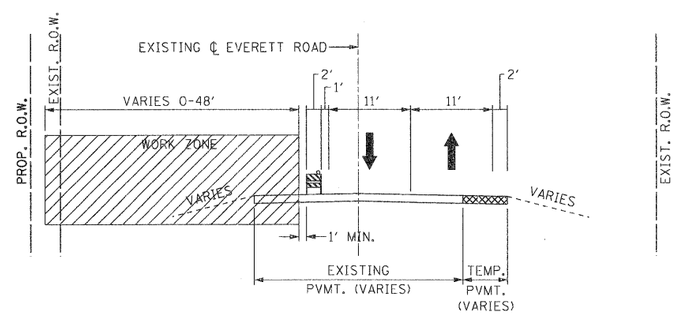
RIVERWOODS ROAD
STAGE 1

TRAFFIC CONTROL GENERAL NOTES

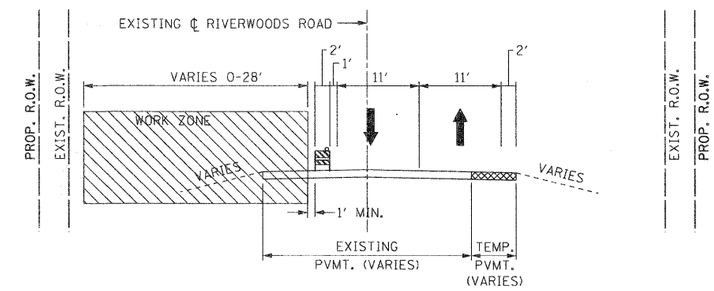
STAGE 2

CONSTRUCTION:
1. CONSTRUCT TEMPORARY PAVEMENT AT INTERSECTION
2. CONSTRUCT NORTH SIDE OF PAVEMENT ALONG EVERETT ROAD
3. CONSTRUCT GUTTER PORTION ONLY FOR SPLITTER ISLANDS ALONG EVERETT ROAD.
4. CONSTRUCT WEST SIDE OF PAVEMENT ALONG RIVERWOODS ROAD.
5. CONSTRUCT GUTTER PORTION ONLY FOR PORTION OF SPLITTER ISLANDS ALONG RIVERWOODS ROAD.
6. CONSTRUCT TEMPORARY PAVEMENT AT SPLITTER ISLANDS LOCATED ALONG EVERETT ROAD.
7. CONSTRUCT GUTTER PORTION ONLY FOR PORTION OF TRUCK APRON.
8. CONSTRUCT BIKE/PED PATH IN NORTHWEST CORNER.
9. CONSTRUCT CURB & GUTTER ONLY WHERE TRAFFIC WILL NOT BE PLACED IN FUTURE STAGES.

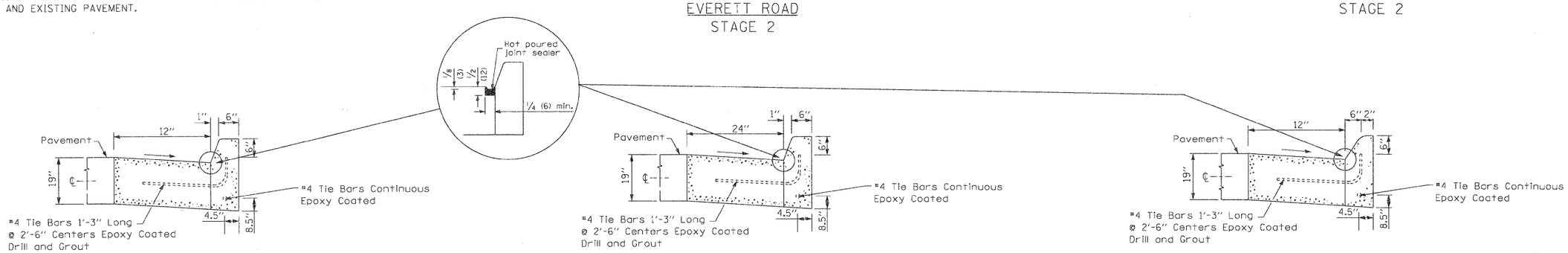
TRAFFIC:
1. INTERSECTION WILL OPERATE AS A STOP CONTROLLED INTERSECTION.
2. MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION AT ALL TIMES.
3. ALL TRAFFIC ON EVERETT ROAD SHIFTED TO SOUTH SIDE ON TEMPORARY AND EXISTING PAVEMENT.
4. ALL TRAFFIC ON RIVERWOODS ROAD SHIFTED TO EAST SIDE ON TEMPORARY AND EXISTING PAVEMENT.



EVERETT ROAD
STAGE 2



RIVERWOODS ROAD
STAGE 2



STAGING DETAIL
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)

STAGING DETAIL
COMBINATION CONCRETE AND GUTTER, TYPE B-6.24 (SPECIAL)

STAGING DETAIL
COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.12 (SPECIAL)

NOTES:

1. THE COST OF ALL TIE BARS, REINFORCING STEEL, HOT POURED JOINT SEALING, STAGING OF CURB AND GUTTER CONSTRUCTION, DRILLING, AND GROUTING SHALL BE INCLUDED IN THE COST OF COMBINATION CONCRETE CURB AND GUTTER (SPECIAL) OF THE TYPE SPECIFIED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

2. SEE "TRAFFIC CONTROL NOTES" ON SHEETS 31 AND 32 FOR LOCATIONS OF STAGED CURB AND GUTTER CONSTRUCTION.

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

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LakeCounty Division of Transportation

TYPICAL SECTIONS - STAGE 1 & 2
TRAFFIC CONTROL PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	32	107

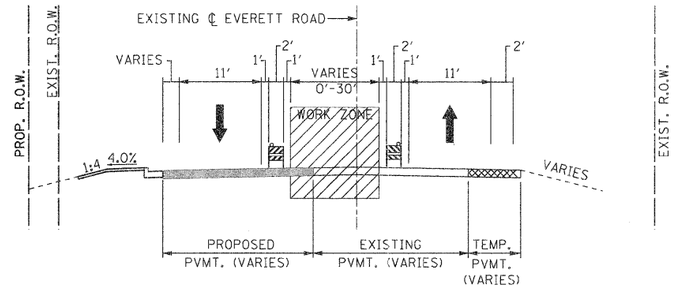
FILE NAME: $FILE$

TRAFFIC CONTROL GENERAL NOTES

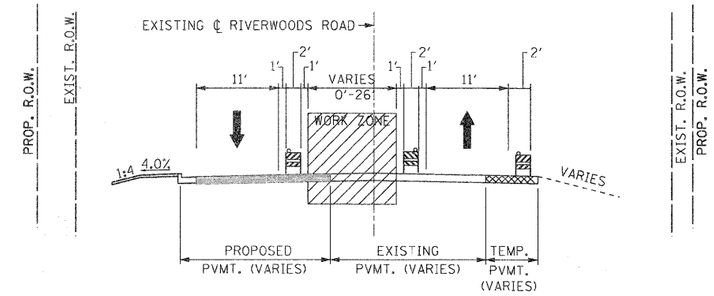
STAGE 3

CONSTRUCTION:
1. CONSTRUCT SOUTH AREA OF PAVEMENT ALONG EVERETT ROAD
2. CONSTRUCT EAST SIDE OF PAVEMENT ALONG NORTH LEG OF RIVERWOODS ROAD.
3. CONSTRUCT GUTTER PORTION ONLY FOR PORTION OF SPLITTER ISLANDS ALONG RIVERWOODS ROAD.
4. CONSTRUCT TEMPORARY PAVEMENT AT SPLITTER ISLANDS LOCATED ALONG RIVERWOODS ROAD.
5. CONSTRUCT GUTTER PORTION ONLY FOR PORTION OF TRUCK APRON.
6. CONSTRUCT CURB & GUTTER ONLY WHERE TRAFFIC WILL NOT BE PLACED IN FUTURE STAGES.

TRAFFIC:
1. INTERSECTION WILL OPERATE AS A STOP CONTROLLED INTERSECTION.
2. MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION AT ALL TIMES.
3. TRAFFIC ON EVERETT ROAD WILL BE SPLIT BY THE WORKZONE.
4. TRAFFIC ON RIVERWOODS ROAD WILL BE SPLIT BY THE WORKZONE.



EVERETT ROAD
STAGE 3

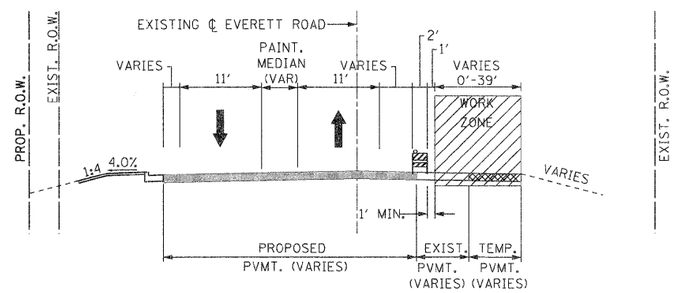


RIVERWOODS ROAD
STAGE 3

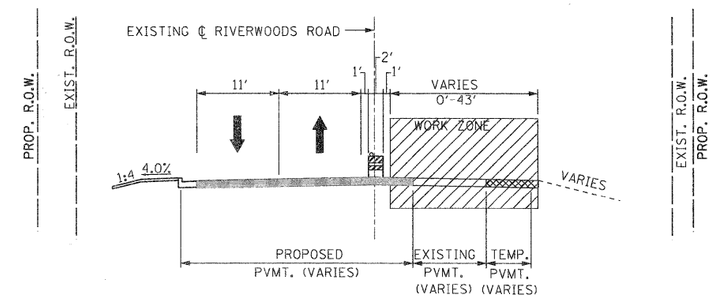
STAGE 4

CONSTRUCTION:
1. CONSTRUCT SOUTHERN SHOULDER ALONG EVERETT ROAD
2. CONSTRUCT REMAINING EAST SIDE OF PAVEMENT ALONG NORTH LEG OF RIVERWOODS ROAD.
3. CONSTRUCT BIKE/PED PATH IN NORTHWEST CORNER.
4. CONSTRUCT BIKE/PED PATH IN SOUTHWEST CORNER.
5. CONSTRUCT BIKE/PED PATH IN SOUTHEAST CORNER.
6. CONSTRUCT GUTTER PORTION ONLY FOR PORTION OF TRUCK APRON.
7. CONSTRUCT CURB & GUTTER ONLY WHERE TRAFFIC WILL NOT BE PLACED IN FUTURE STAGES.
8. REMOVE TEMPORARY PAVEMENT ALONG SOUTH SIDE OF EVERETT ROAD.
9. REMOVE TEMPORARY PAVEMENT ALONG EAST SIDE OF RIVERWOODS ROAD.

TRAFFIC:
1. INTERSECTION WILL OPERATE AS A STOP CONTROLLED INTERSECTION.
2. MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION AT ALL TIMES.
3. ALL TRAFFIC ON EVERETT ROAD SHIFTED TO PROPOSED AND TEMPORARY PAVEMENT.
4. ALL TRAFFIC ON RIVERWOODS ROAD SHIFTED TO PROPOSED AND TEMPORARY PAVEMENT.



EVERETT ROAD
STAGE 4

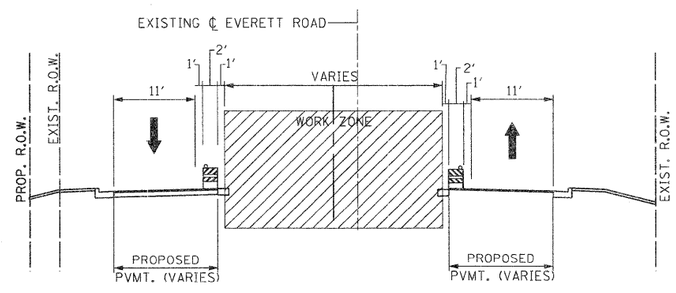


RIVERWOODS ROAD
STAGE 4

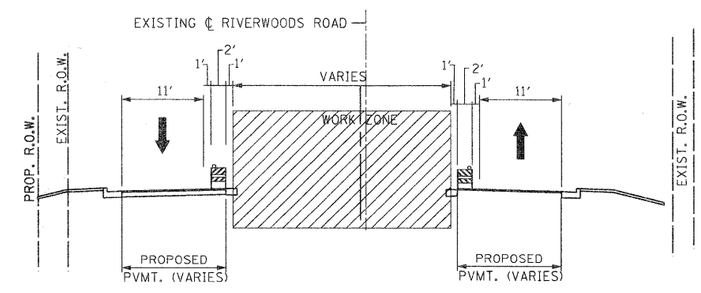
STAGE 5

CONSTRUCTION:
1. CONSTRUCT TRUCK APRON & CENTER ISLAND.
2. CONSTRUCT CURB PORTION IN AREAS WHERE ONLY GUTTER PORTION WAS INSTALLED.
3. REMOVE TEMPORARY PAVEMENT IN CENTER ISLAND AREA.
4. REMOVE TEMPORARY PAVEMENT IN SPLITTER ISLAND AREAS.
5. CONSTRUCT REMAINING PORTIONS OF SPLITTER ISLANDS.
6. COMPLETE FINAL PAVEMENT MARKINGS.
7. LANDSCAPE CENTER ISLAND AND SPLITTER ISLANDS.
8. RESURFACE PAVEMENT AT PROJECT LIMITS

TRAFFIC:
1. INTERSECTION WILL OPERATE AS A ROUNDABOUT.
2. POST 15 MPH WORK ZONE SPEED LIMIT ON ROUNDABOUT.
3. ALL TRAFFIC ALONG ON ALL LEGS WILL TRAVEL ALONG FINAL PROPOSED PAVEMENT.
4. TRAFFIC WILL OPERATE UNDER 11' LANES ADJACENT TO THE ROUNDABOUT.
5. ADDITIONAL TEMPORARY PAVEMENT MARKING WILL BE NEEDED TO FACILITATE INTERSECTION OPERATIONS.
6. ADDITIONAL BARRICADES, SIGNING AND TRAFFIC CONTROL DEVICES WILL BE NEEDED TO FACILITATE INTERSECTION OPERATIONS.
7. UTILIZE TRAFFIC CONTROL STANDARDS 701301-03, 701306-02, 701311-03 FOR RESURFACING OPERATIONS.



EVERETT ROAD
STAGE 5



RIVERWOODS ROAD
STAGE 5

634/15

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

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LakeCounty Division of Transportation

TYPICAL SECTIONS – STAGE 3, 4 & 5
TRAFFIC CONTROL PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	33	107

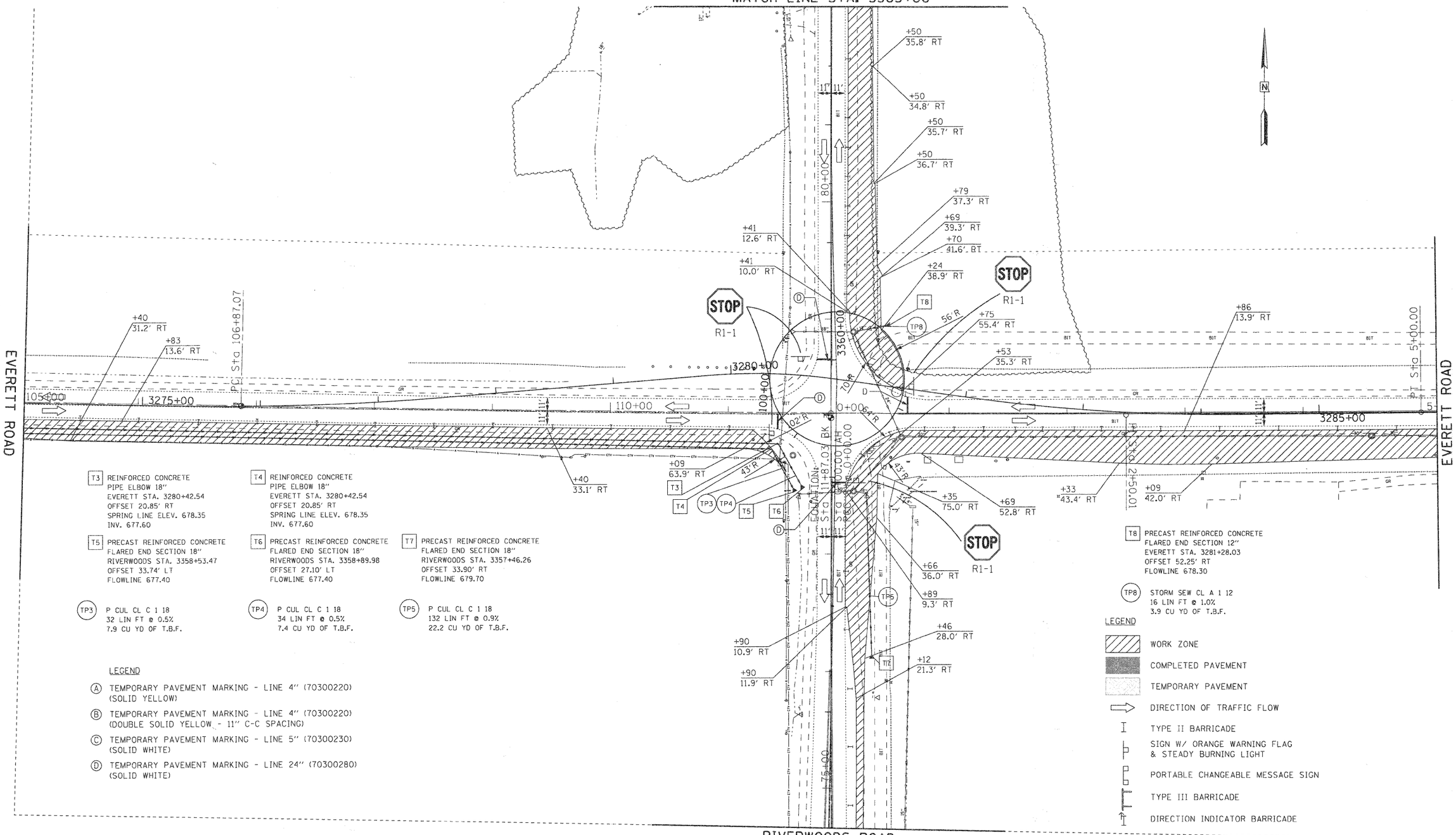
FILE NAME: $FILE$

RIVERWOODS ROAD
MATCH LINE STA. 3363+00

EVERETT ROAD
MATCH LINE STA. 3274+00

EVERETT ROAD
MATCH LINE STA. 3286+00

RIVERWOODS ROAD
MATCH LINE STA. 3356+00



T3 REINFORCED CONCRETE
PIPE ELBOW 18"
EVERETT STA. 3280+42.54
OFFSET 20.85' RT
SPRING LINE ELEV. 678.35
INV. 677.60

T4 REINFORCED CONCRETE
PIPE ELBOW 18"
EVERETT STA. 3280+42.54
OFFSET 20.85' RT
SPRING LINE ELEV. 678.35
INV. 677.60

T5 PRECAST REINFORCED CONCRETE
FLARED END SECTION 18"
RIVERWOODS STA. 3358+53.47
OFFSET 33.74' LT
FLOWLINE 677.40

T6 PRECAST REINFORCED CONCRETE
FLARED END SECTION 18"
RIVERWOODS STA. 3358+89.98
OFFSET 27.10' LT
FLOWLINE 677.40

T7 PRECAST REINFORCED CONCRETE
FLARED END SECTION 18"
RIVERWOODS STA. 3357+46.26
OFFSET 33.90' RT
FLOWLINE 679.70

T8 PRECAST REINFORCED CONCRETE
FLARED END SECTION 12"
EVERETT STA. 3281+28.03
OFFSET 52.25' RT
FLOWLINE 678.30

TP3 P CUL CL C 1 18
32 LIN FT @ 0.5%
7.9 CU YD OF T.B.F.

TP4 P CUL CL C 1 18
34 LIN FT @ 0.5%
7.4 CU YD OF T.B.F.

TP5 P CUL CL C 1 18
132 LIN FT @ 0.9%
22.2 CU YD OF T.B.F.

TP8 STORM SEW CL A 1 12
16 LIN FT @ 1.0%
3.9 CU YD OF T.B.F.

LEGEND

(A) TEMPORARY PAVEMENT MARKING - LINE 4" (70300220)
(SOLID YELLOW)

(B) TEMPORARY PAVEMENT MARKING - LINE 4" (70300220)
(DOUBLE SOLID YELLOW - 11" C-C SPACING)

(C) TEMPORARY PAVEMENT MARKING - LINE 5" (70300230)
(SOLID WHITE)

(D) TEMPORARY PAVEMENT MARKING - LINE 24" (70300280)
(SOLID WHITE)

LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
- SIGN W/ ORANGE WARNING FLAG & STEADY BURNING LIGHT
- PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- DIRECTION INDICATOR BARRICADE

63415

REVISIONS / REMARKS						SCALE	HDR	LakeCounty Division of Transportation	ROUNDABOUT - STAGE 1	ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM	0 40 80	30 N LaSalle Street, Suite 3220 Chicago, IL 60602 312-443-4900 HDR Engineering, Inc.		TRAFFIC CONTROL PLAN	58/52	136	04-00136-06-CH	34	107
		__/__/__		CHECKED BY:	MPK/JLC									
		__/__/__		DATE:	1/22/2010									

FILE NAME: $FILE$

LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
- SIGN W/ ORANGE WARNING FLAG & FLASHING LIGHT
- PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- DIRECTION INDICATOR BARRICADE

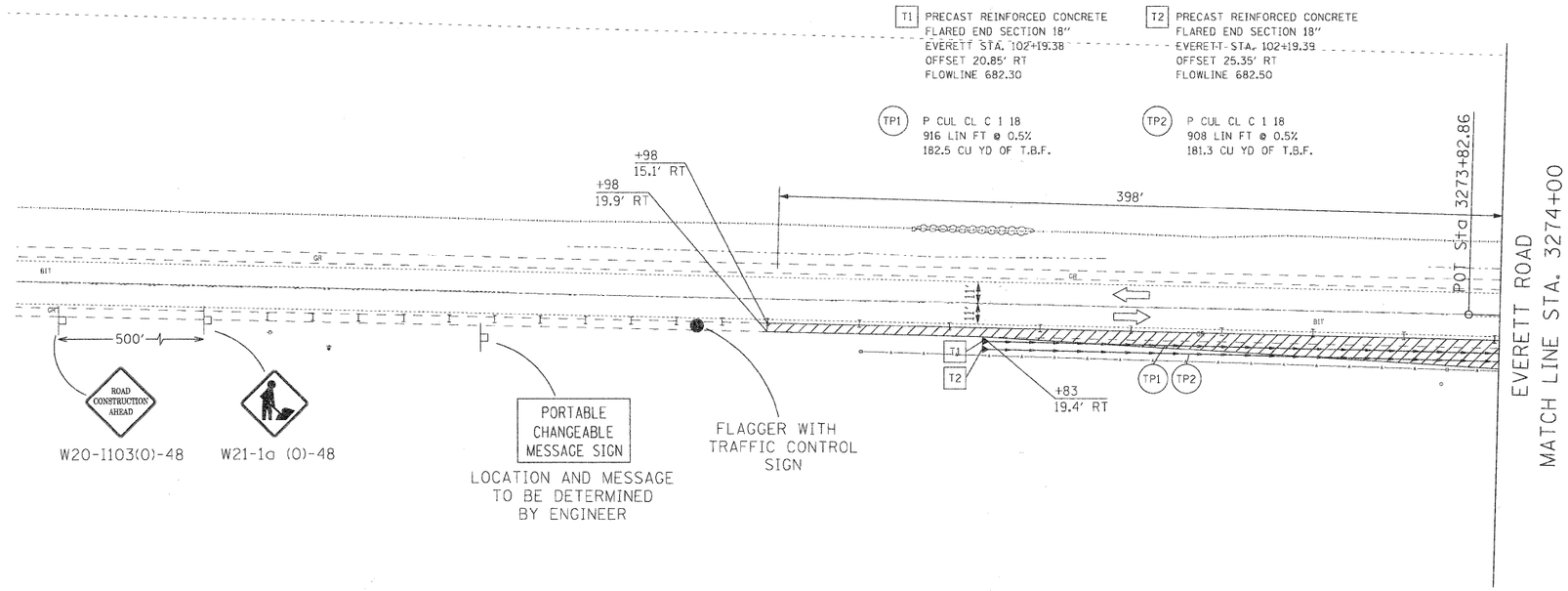
LEGEND

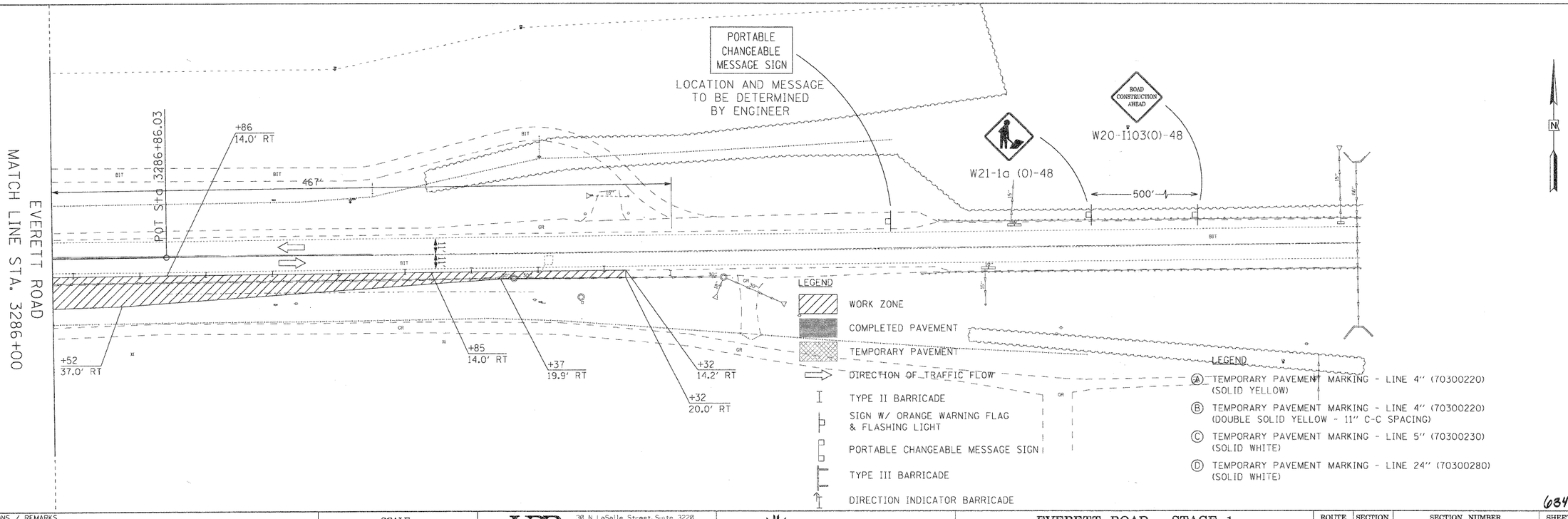
(A) TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (SOLID YELLOW)

(B) TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (DOUBLE SOLID YELLOW - 11" C-C SPACING)

(C) TEMPORARY PAVEMENT MARKING - LINE 5" (70300230) (SOLID WHITE)

(D) TEMPORARY PAVEMENT MARKING - LINE 24" (70300280) (SOLID WHITE)





68415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
---		--/--/--	---	CHECKED BY:	MPK/JLC
---		--/--/--	---	DATE:	1/22/2010

SCALE 0 40 80

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LakeCounty Division of Transportation

EVERETT ROAD - STAGE 1

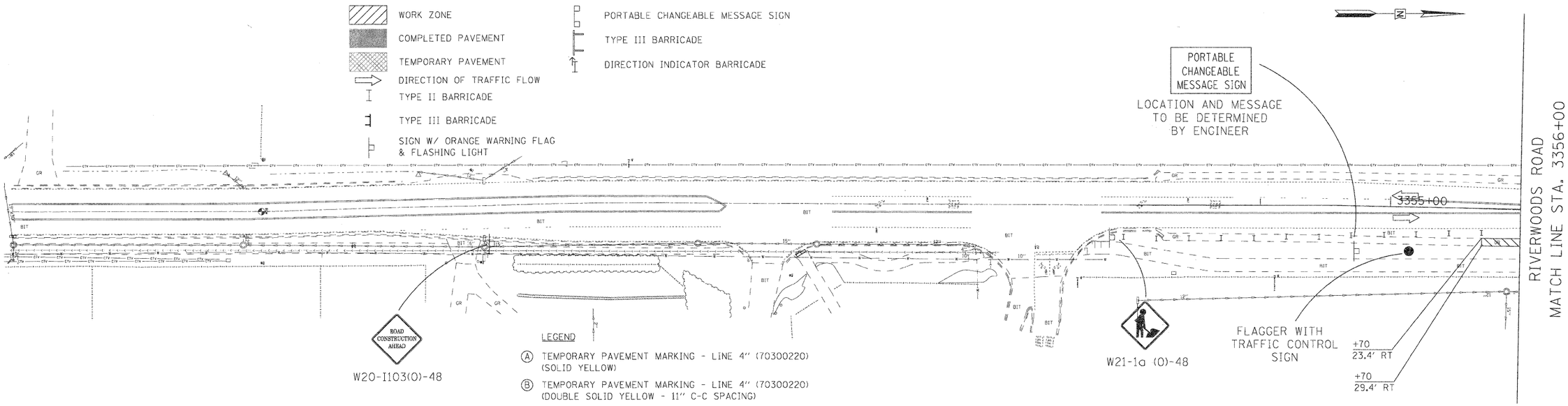
TRAFFIC CONTROL PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	35	107

FILE NAME: $FILE$

LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
- TYPE III BARRICADE
- SIGN W/ ORANGE WARNING FLAG & FLASHING LIGHT
- PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- DIRECTION INDICATOR BARRICADE



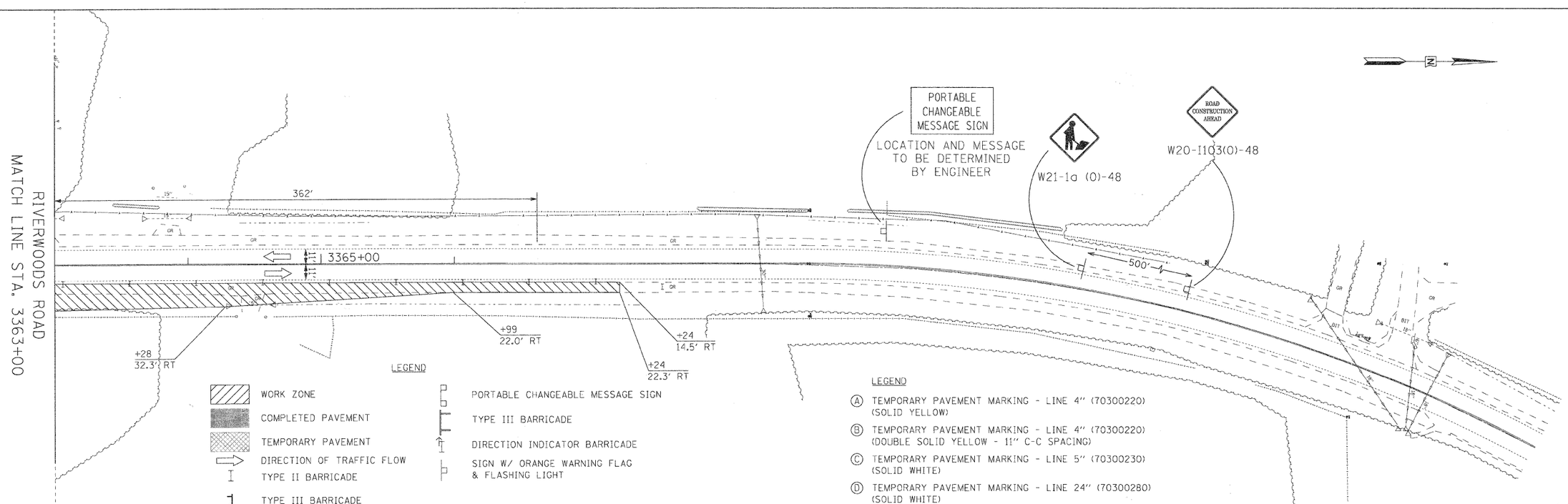
LEGEND

(A) TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (SOLID YELLOW)

(B) TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (DOUBLE SOLID YELLOW - 11" C-C SPACING)

(C) TEMPORARY PAVEMENT MARKING - LINE 5" (70300230) (SOLID WHITE)

(D) TEMPORARY PAVEMENT MARKING - LINE 24" (70300280) (SOLID WHITE)



LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
- TYPE III BARRICADE
- PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- DIRECTION INDICATOR BARRICADE
- SIGN W/ ORANGE WARNING FLAG & FLASHING LIGHT

LEGEND

(A) TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (SOLID YELLOW)

(B) TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (DOUBLE SOLID YELLOW - 11" C-C SPACING)

(C) TEMPORARY PAVEMENT MARKING - LINE 5" (70300230) (SOLID WHITE)

(D) TEMPORARY PAVEMENT MARKING - LINE 24" (70300280) (SOLID WHITE)

68415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
				CHECKED BY:	MPK/JLC
				DATE:	1/22/2010

SCALE 0 40 80

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LakeCounty Division of Transportation

RIVERWOODS ROAD – STAGE 1

TRAFFIC CONTROL PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	36	107

FILE NAME: $FILE$

RIVERWOODS ROAD
MATCH LINE STA. 3363+00

EVERETT ROAD
MATCH LINE STA. 3274+00

EVERETT ROAD
MATCH LINE STA. 3286+00

RIVERWOODS ROAD
MATCH LINE STA. 3356+00

W1-4R(O)-48
W1-4L(O)-48
STOP
R1-1
Sta 106+87.07
Sta 5+00.00
105+00
110+00
3275+00
3280+00
3285+00
3360+00
2085'R
1960'R
3000'R
1000'R
50'R
45'R
30'R
48'R
+06 12.6 RT
+06 23.6 RT
+06 34.6 RT
+87 22.0 RT
+87 11.0 RT
+86 33.0 RT
+47 20.3 RT
+16 7.7 RT
+43 31.5 RT
+16 18.7 RT
+04 29.1 RT
+62 14.3 RT
+76 24.6 RT
+77 35.6 RT
+05 9.0 RT
+06 20.0 RT
+06 31.0 RT
+40 7.2 RT
+40 18.2 RT
+40 29.2 RT
+44 7.1 RT
+44 18.1 RT
+44 29.1 RT
+61 8.0 RT
+61 19.0 RT
+61 30.0 RT
+23 14.7 RT
+22 25.7 RT
+21 36.6 RT
+75 40.3 RT
+15 12.0 RT
+93 23.0 RT
+67 12.0 RT
+93 34.0 RT
+66 34.0 RT
+47 15.0 RT
+46 26.0 RT
+47 4.0 RT
+40 4.0 RT
+39 15.0 RT
+39 26.0 RT
+02 9.8 RT
+02 20.8 RT
+02 31.8 RT
REMOVE END SECTIONS T5 AND T6
CONNECT CULVERTS TP3 AND TP4 TO
PROPOSED CB 5 AND MH 7
INV EL. = 677.40
15:1 TAPER
TEMPORARY CONCRETE BARRIER
IMPACT ATTENUATOR

LEGEND

Ⓐ TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (SOLID YELLOW)

Ⓑ TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (DOUBLE SOLID YELLOW - 11" C-C SPACING)

Ⓒ TEMPORARY PAVEMENT MARKING - LINE 5" (70300230) (SOLID WHITE)

Ⓓ TEMPORARY PAVEMENT MARKING - LINE 24" (70300280) (SOLID WHITE)

LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
- SIGN W/ ORANGE WARNING FLAG & FLASHING LIGHT
- PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- DIRECTION INDICATOR BARRICADE

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALE 0 40 80

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty Division of Transportation

ROUNDABOUT - STAGE 2
TRAFFIC CONTROL PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	37	107

FILE NAME: $FILE$

WORK ZONE
COMPLETED PAVEMENT
TEMPORARY PAVEMENT
DIRECTION OF TRAFFIC FLOW
TYPE II BARRICADE
SIGN W/ ORANGE WARNING FLAG & FLASHING LIGHT
PORTABLE CHANGEABLE MESSAGE SIGN
TYPE III BARRICADE
DIRECTION INDICATOR BARRICADE

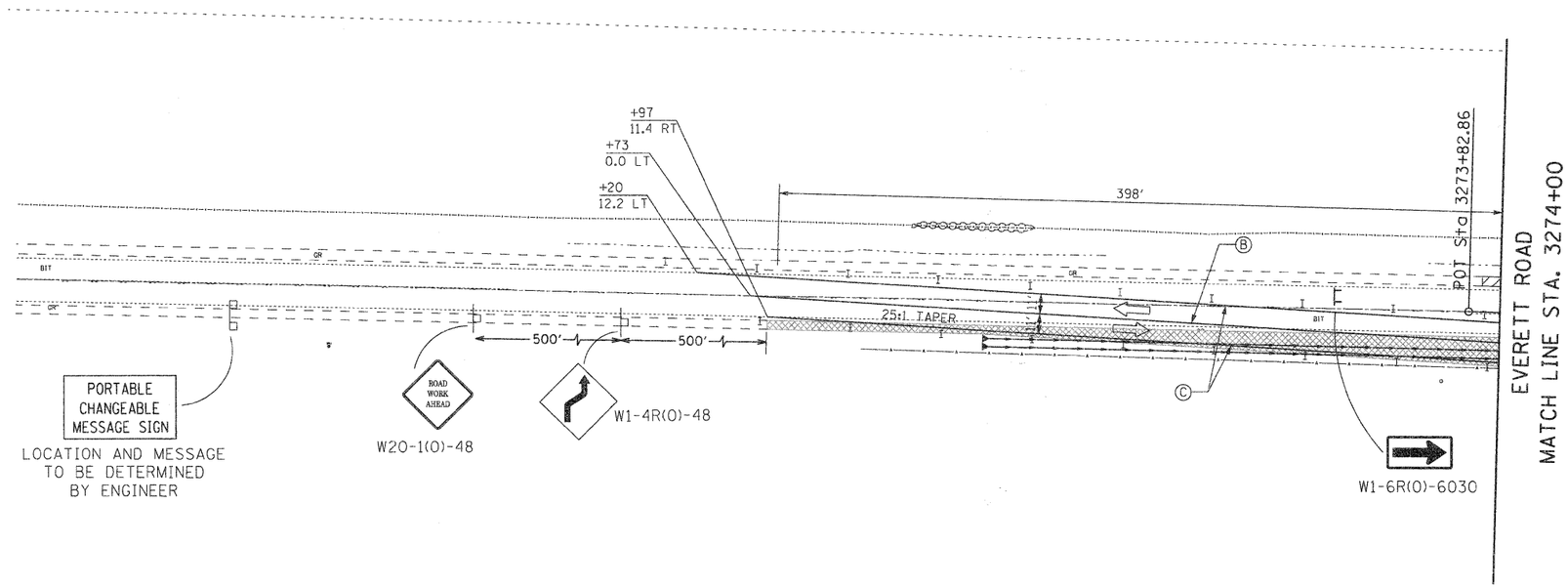
LEGEND

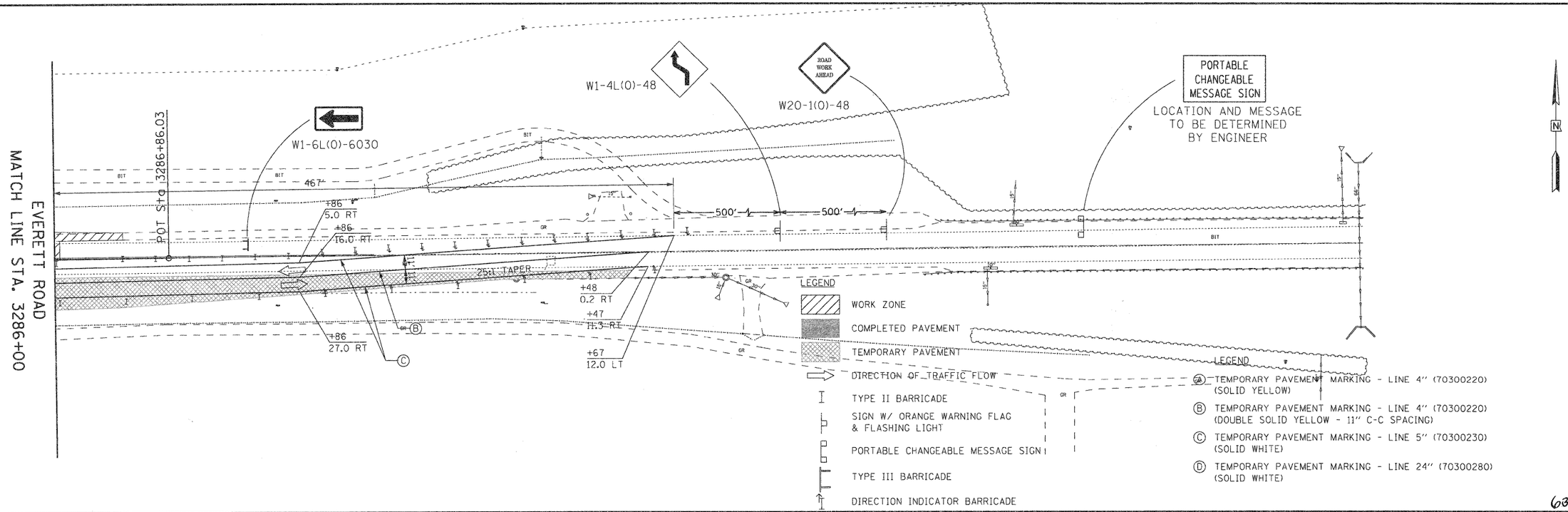
Ⓐ TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (SOLID YELLOW)

Ⓑ TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (DOUBLE SOLID YELLOW - 11" C-C SPACING)

Ⓒ TEMPORARY PAVEMENT MARKING - LINE 5" (70300230) (SOLID WHITE)

Ⓓ TEMPORARY PAVEMENT MARKING - LINE 24" (70300280) (SOLID WHITE)





63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALE 0 40 80

HDR Engineering, Inc. — 30 N LaSalle Street, Suite 3220, Chicago, IL 60602, 312-443-4900

LakeCounty Division of Transportation

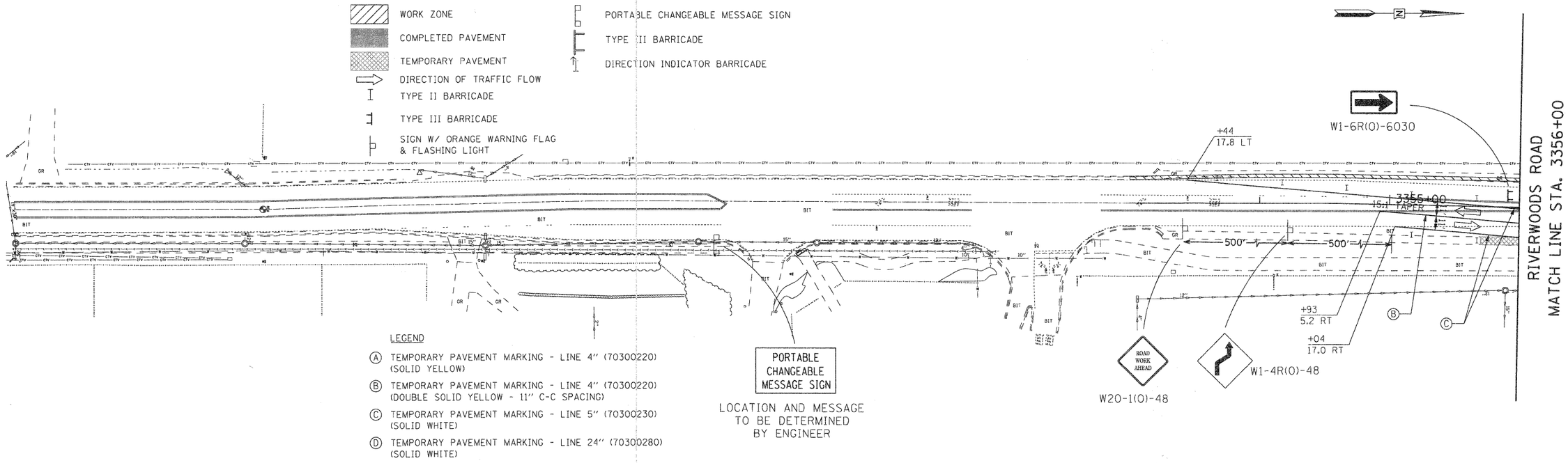
EVERETT ROAD - STAGE 2
TRAFFIC CONTROL PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	38	107

FILE NAME: $FILE$

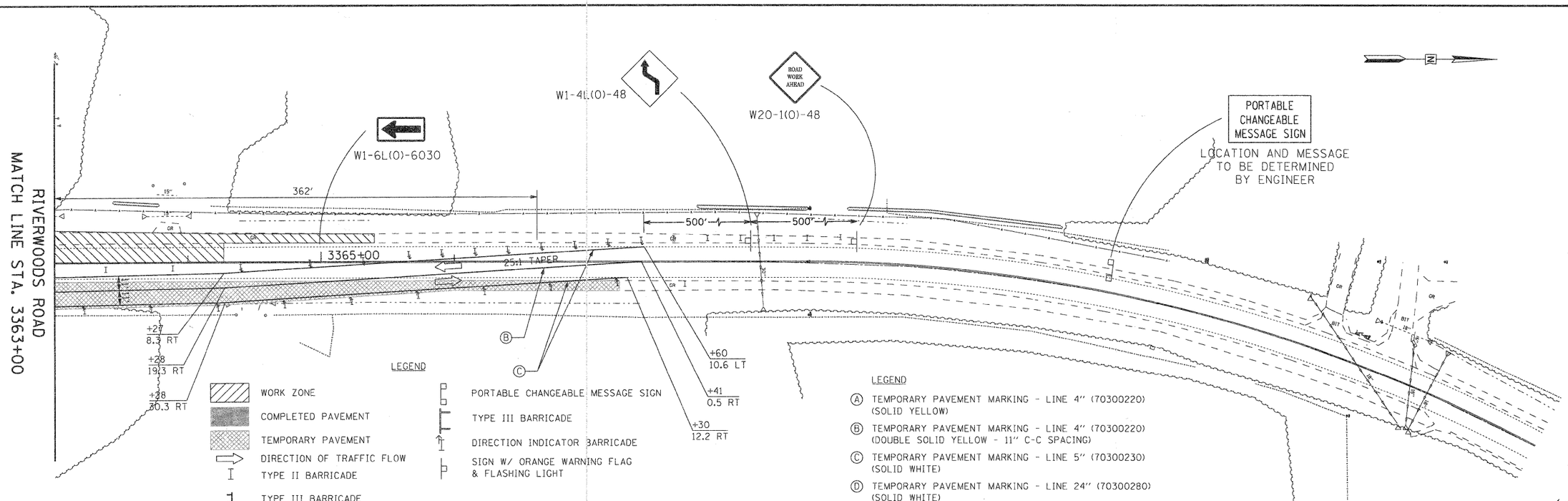
LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
- TYPE III BARRICADE
- SIGN W/ ORANGE WARNING FLAG & FLASHING LIGHT
- PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- DIRECTION INDICATOR BARRICADE



LEGEND

- (A) TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (SOLID YELLOW)
- (B) TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (DOUBLE SOLID YELLOW - 11" C-C SPACING)
- (C) TEMPORARY PAVEMENT MARKING - LINE 5" (70300230) (SOLID WHITE)
- (D) TEMPORARY PAVEMENT MARKING - LINE 24" (70300280) (SOLID WHITE)



LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
- TYPE III BARRICADE
- PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- DIRECTION INDICATOR BARRICADE
- SIGN W/ ORANGE WARNING FLAG & FLASHING LIGHT

LEGEND

- (A) TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (SOLID YELLOW)
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- (C) TEMPORARY PAVEMENT MARKING - LINE 5" (70300230) (SOLID WHITE)
- (D) TEMPORARY PAVEMENT MARKING - LINE 24" (70300280) (SOLID WHITE)

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALE 0 40 80

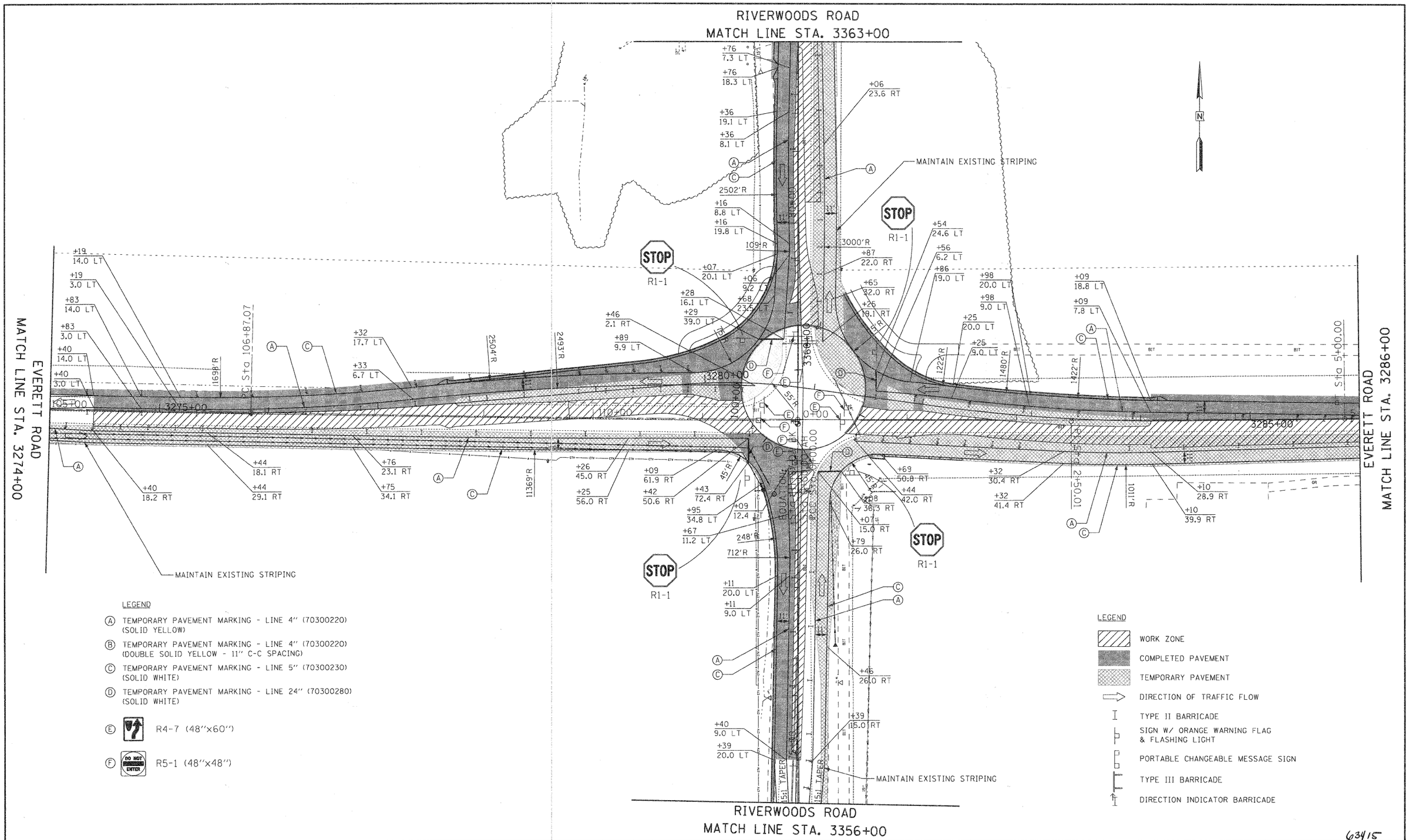
HDR Engineering, Inc. — 30 N LaSalle Street, Suite 3220, Chicago, IL 60602, 312-443-4900

LakeCounty Division of Transportation

RIVERWOODS ROAD - STAGE 2
TRAFFIC CONTROL PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	39	107

FILE NAME: $FILE$



LEGEND

(A) TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (SOLID YELLOW)

(B) TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (DOUBLE SOLID YELLOW - 11" C-C SPACING)

(C) TEMPORARY PAVEMENT MARKING - LINE 5" (70300230) (SOLID WHITE)

(D) TEMPORARY PAVEMENT MARKING - LINE 24" (70300280) (SOLID WHITE)

(E) R4-7 (48"x60")

(F) R5-1 (48"x48") — DO NOT ENTER

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALE 0 40 80

LakeCounty Division of Transportation

ROUNDABOUT - STAGE 3
TRAFFIC CONTROL PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	40	107

FILE NAME: $FILE$

WORK ZONE
COMPLETED PAVEMENT
TEMPORARY PAVEMENT
DIRECTION OF TRAFFIC FLOW
TYPE II BARRICADE
SIGN W/ ORANGE WARNING FLAG & FLASHING LIGHT
PORTABLE CHANGEABLE MESSAGE SIGN
TYPE III BARRICADE
DIRECTION INDICATOR BARRICADE

LEGEND

Ⓐ TEMPORARY PAVEMENT MARKING - LINE 4" (70300220) (SOLID YELLOW)

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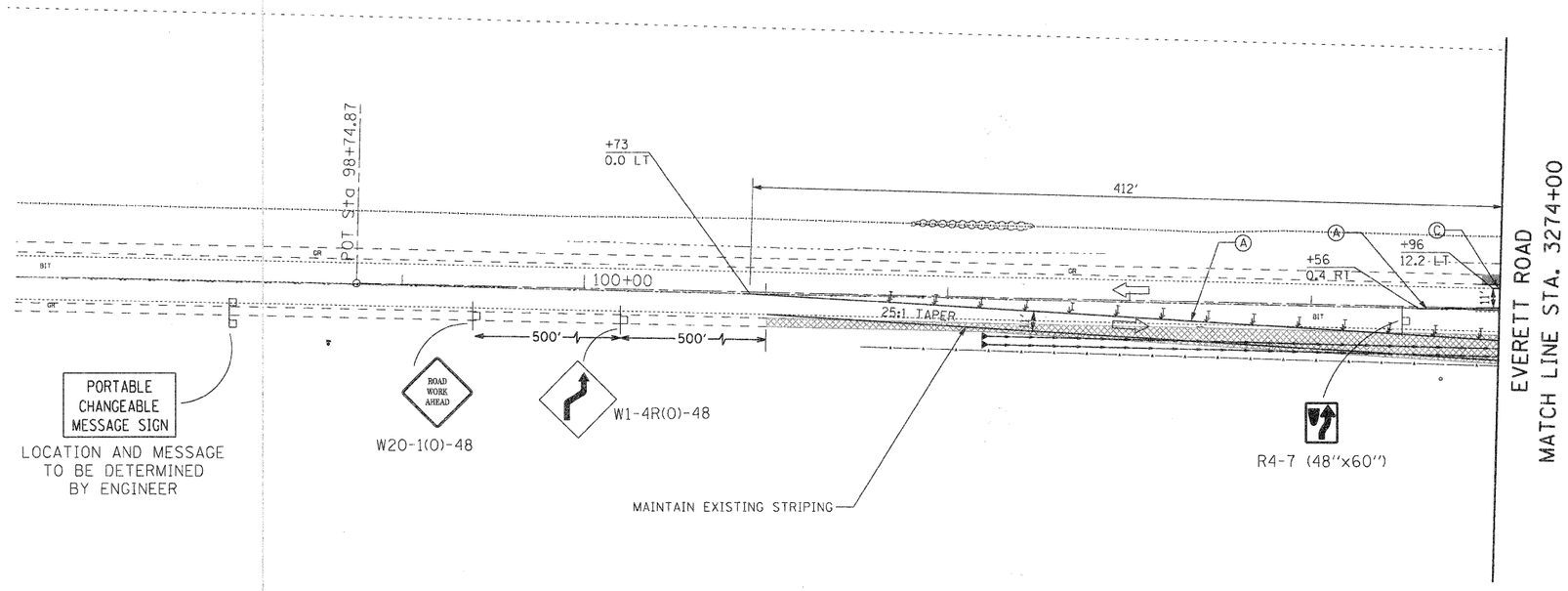
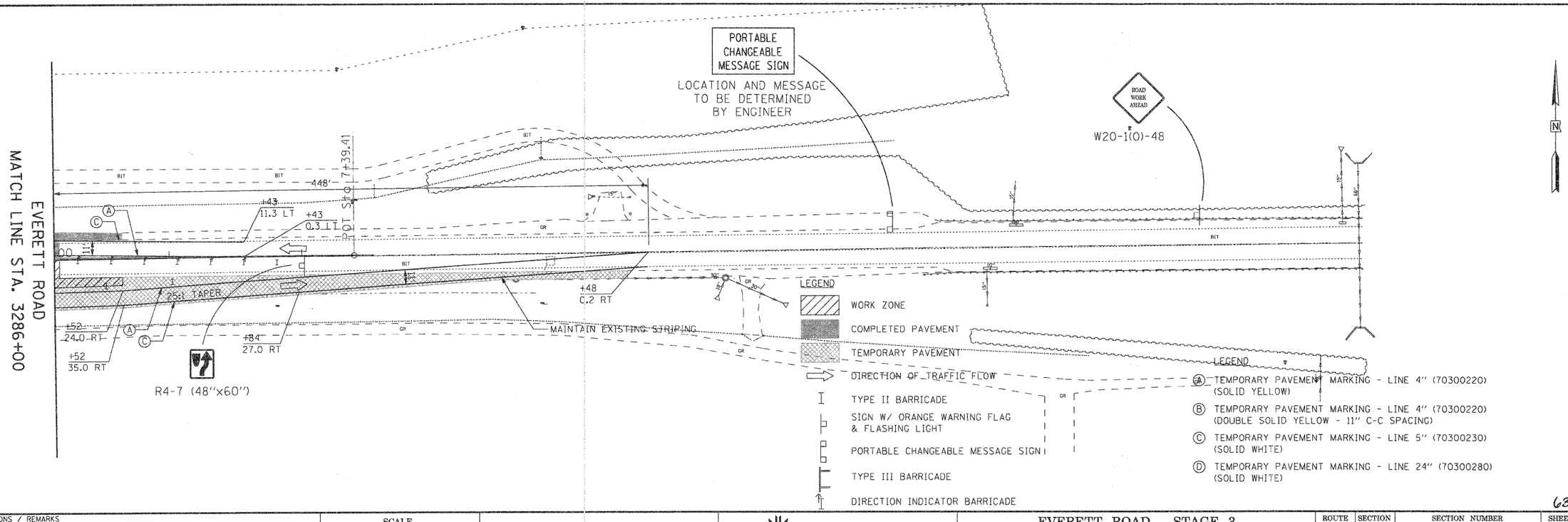




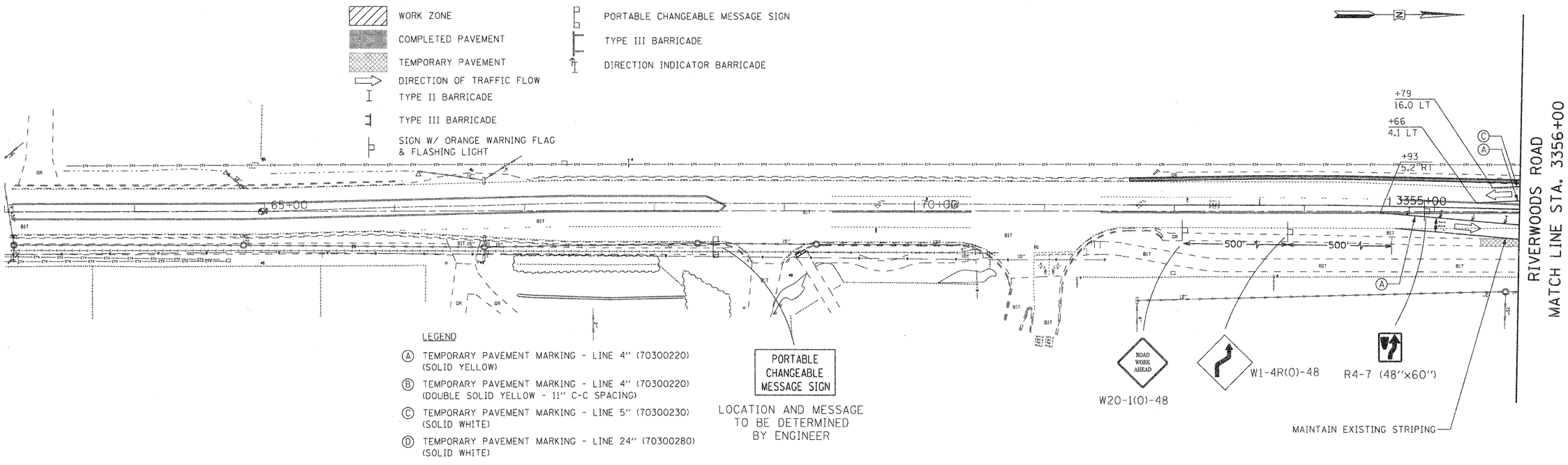
63415

REVISIONS / REMARKS						SCALE	LakeCounty Division of Transportation	EVERETT ROAD - STAGE 3	ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM	0 40 80		TRAFFIC CONTROL PLAN	58/52	136	04-00136-06-CH	41	107
		/ /		CHECKED BY:	MPK/JLC								
		/ /		DATE:	1/22/2010								

FILE NAME: $FILE$

LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
- TYPE III BARRICADE
- SIGN W/ ORANGE WARNING FLAG & FLASHING LIGHT
- PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- DIRECTION INDICATOR BARRICADE



LEGEND

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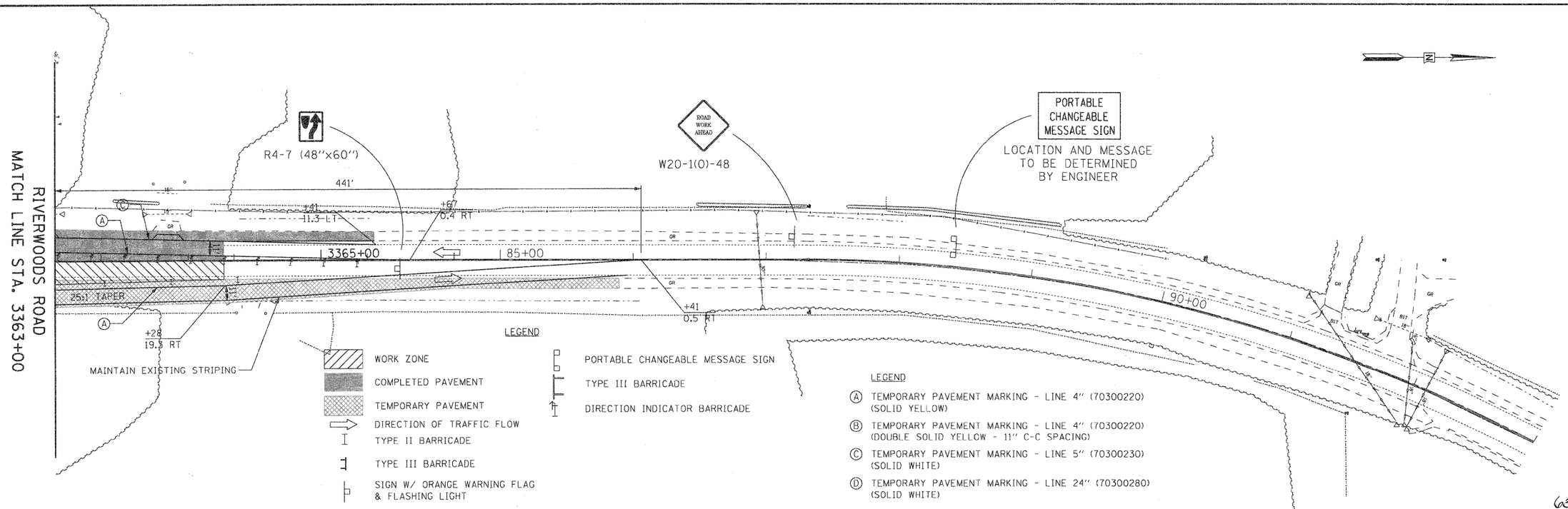

LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
- TYPE III BARRICADE
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63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALE 0 40 80

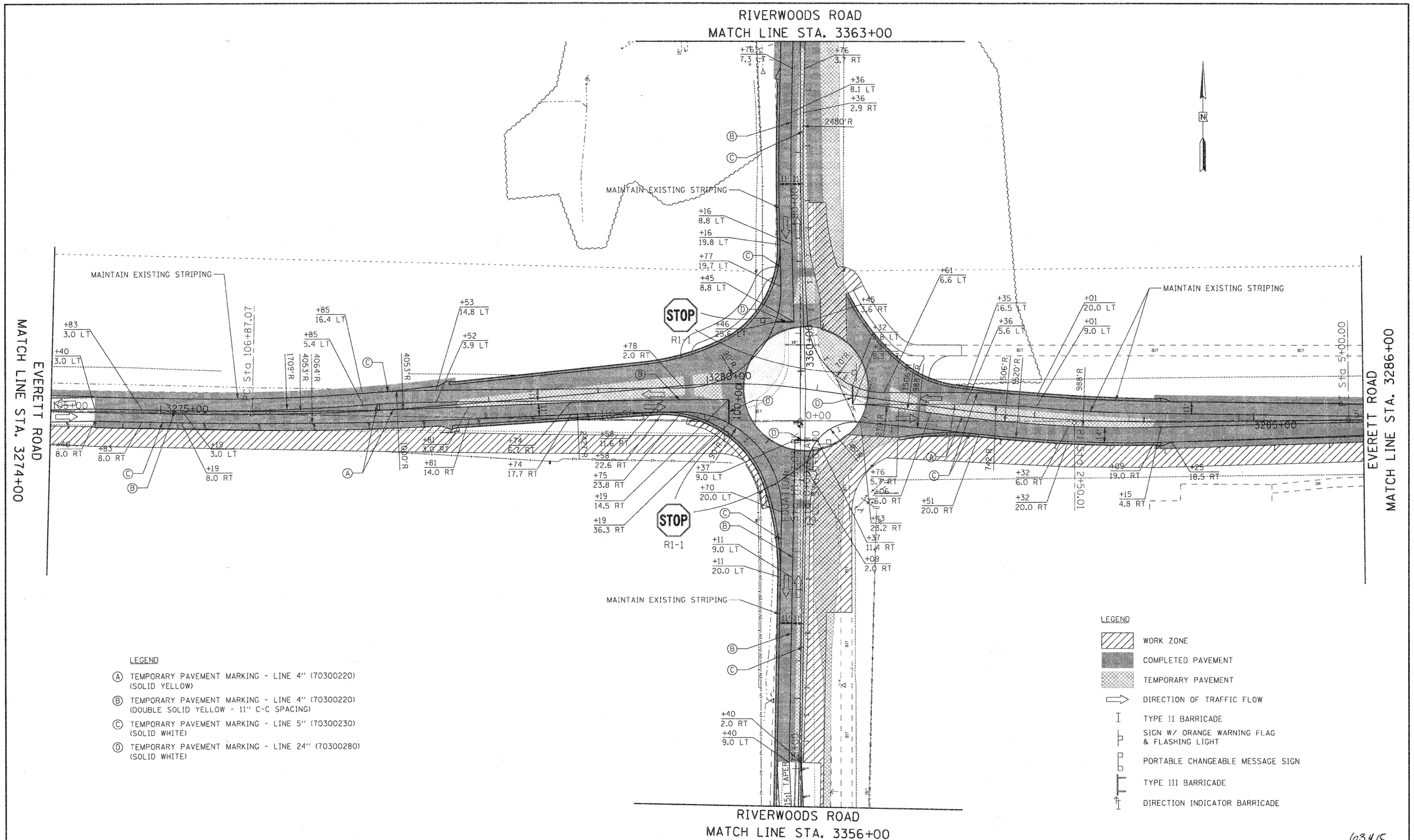
LakeCounty Division of Transportation

RIVERWOODS ROAD - STAGE 3

TRAFFIC CONTROL PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	42	107

FILE NAME: $FILE$



63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

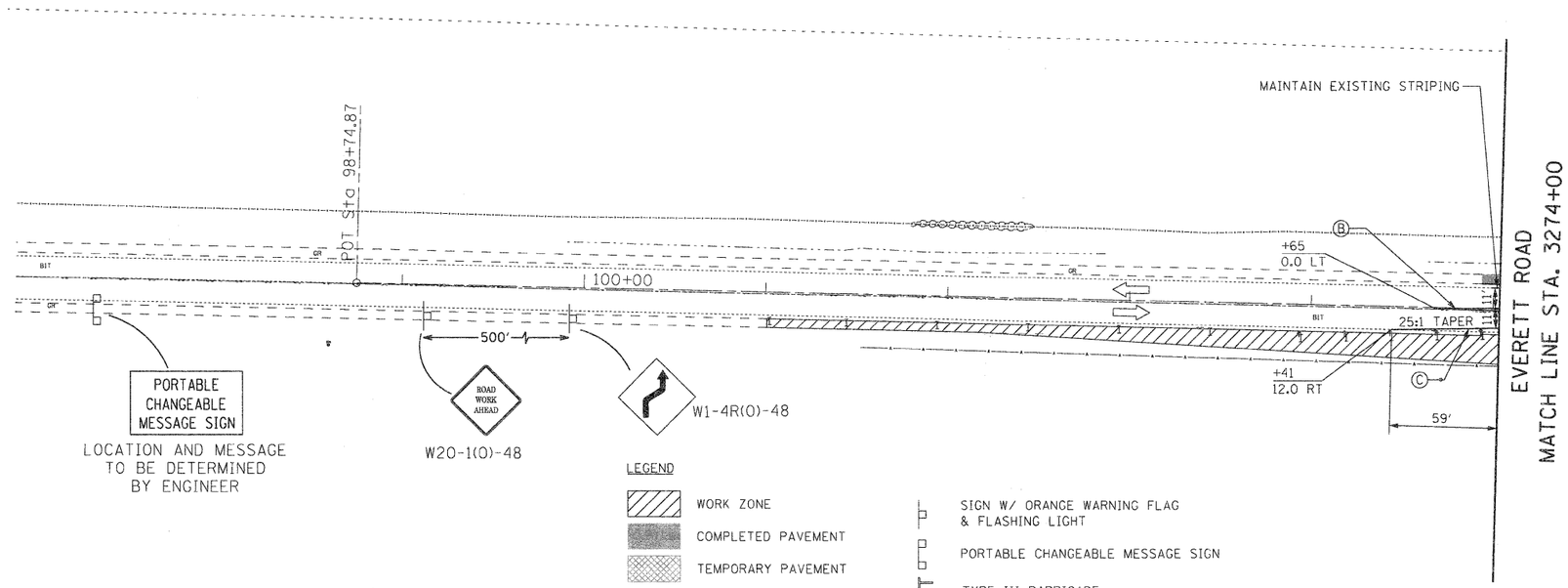
SCALE 0 40 80

LakeCounty Division of Transportation

ROUNDABOUT - STAGE 4
TRAFFIC CONTROL PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	43	107

FILE NAME: $FILE$



LEGEND

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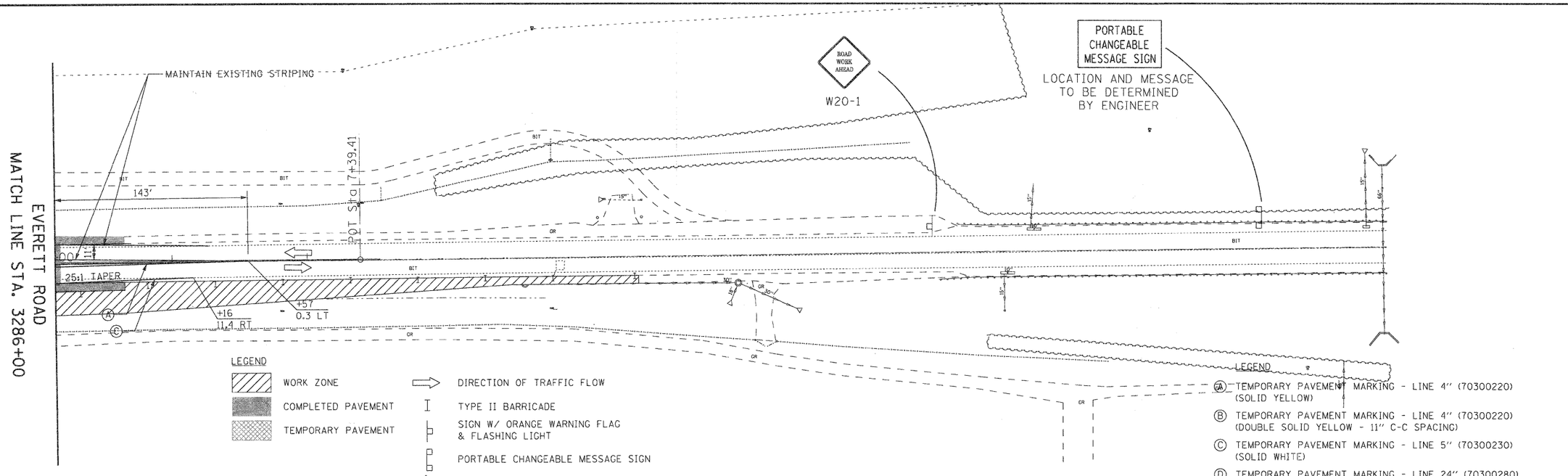
LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
- SIGN W/ ORANGE WARNING FLAG & FLASHING LIGHT
- PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- DIRECTION INDICATOR BARRICADE



LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
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63415

REVISIONS / REMARKS						SCALE	LakeCounty Division of Transportation	EVERETT ROAD – STAGE 4	ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM	0 40 80		TRAFFIC CONTROL PLAN	58/52	136	04-00136-06-CH	44	107
		/ /		CHECKED BY:	MPK/JLC								
		/ /		DATE:	1/22/2010								

FILE NAME: $FILE$

LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
- TYPE III BARRICADE
- SIGN W/ ORANGE WARNING FLAG & FLASHING LIGHT
- PORTABLE CHANGEABLE MESSAGE SIGN
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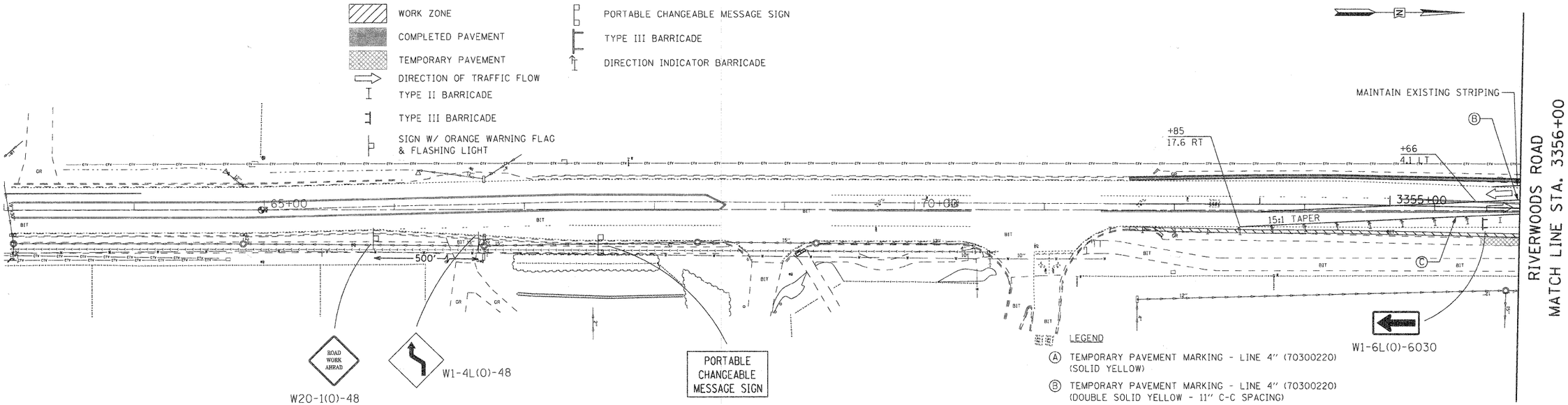

LEGEND

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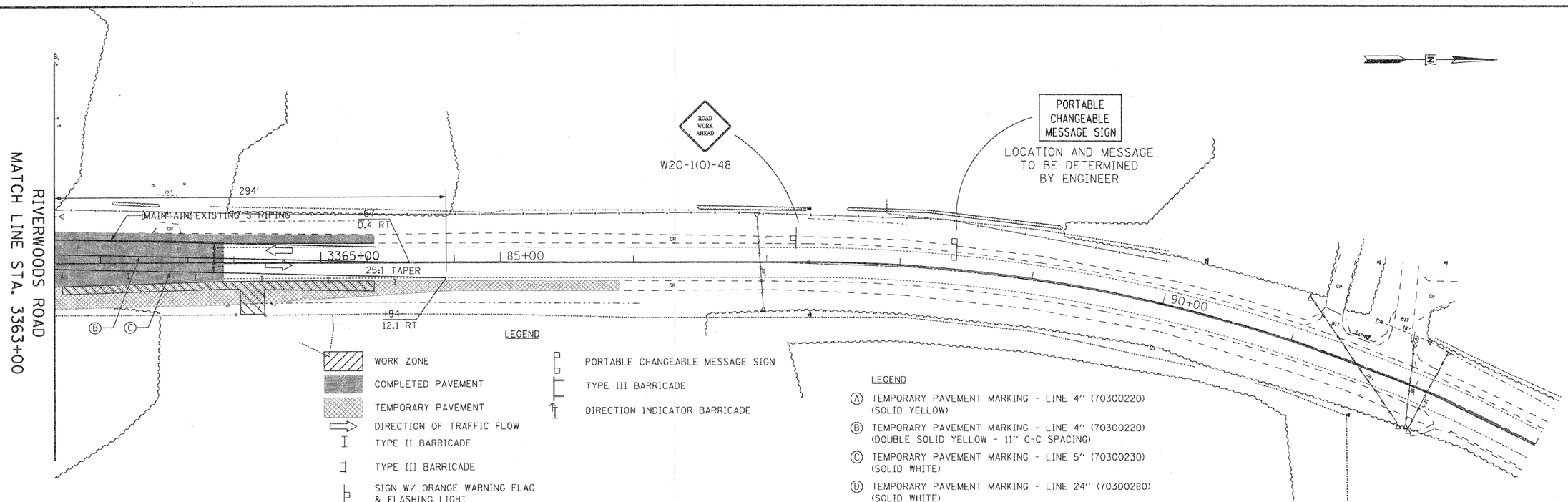

LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
- TYPE III BARRICADE
- SIGN W/ ORANGE WARNING FLAG & FLASHING LIGHT
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63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALE 0 40 80

LakeCounty Division of Transportation

RIVERWOODS ROAD - STAGE 4

TRAFFIC CONTROL PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	45	107

FILE NAME: $FILE$

RIVERWOODS ROAD
MATCH LINE STA. 3363+00

TYPE III BARRICADE
PT Sta 3362+46.46
R4-7 (48"x60")

N

PORTABLE CHANGEABLE MESSAGE SIGN
LOCATION AND MESSAGE TO BE DETERMINED BY ENGINEER

TYPE III BARRICADE

POT Sta 3274+83.24
PC Sta 3275+25.19
PC Sta 106+87.07
PTI Sta 3277+60.81
PC Sta 3279+79.59
PC Sta 3360+22.40
Sta 3282+04.74
PT Sta 3284+28.70
PT Sta 5+00.00
PT Sta 2+50.01
105+00
3275+00
110+00
3280+00
100+00
3360+00
3285+00

EVERETT ROAD
MATCH LINE STA. 3274+00

EVERETT ROAD
MATCH LINE STA. 3286+00

PORTABLE CHANGEABLE MESSAGE SIGN
LOCATION AND MESSAGE TO BE DETERMINED BY ENGINEER

R4-7 (48"x60")

R4-7 (48"x60")

TYPE III BARRICADE

R4-7 (48"x60")

RIVERWOODS ROAD
MATCH LINE STA. 3356+00

LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
- SIGN W/ ORANGE WARNING FLAG & FLASHING LIGHT
- PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- DIRECTION INDICATOR BARRICADE

NOTE:
PERMANENT PAVEMENT STRIPING AND SIGNING SHALL BE UTILIZED FOR STAGE 5 PAVEMENT MARKINGS. CONTRACTOR SHALL PLACE HMA SURFACE PRIOR TO STARTING WORK ON STAGE 5.

68415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALE 0 40 80

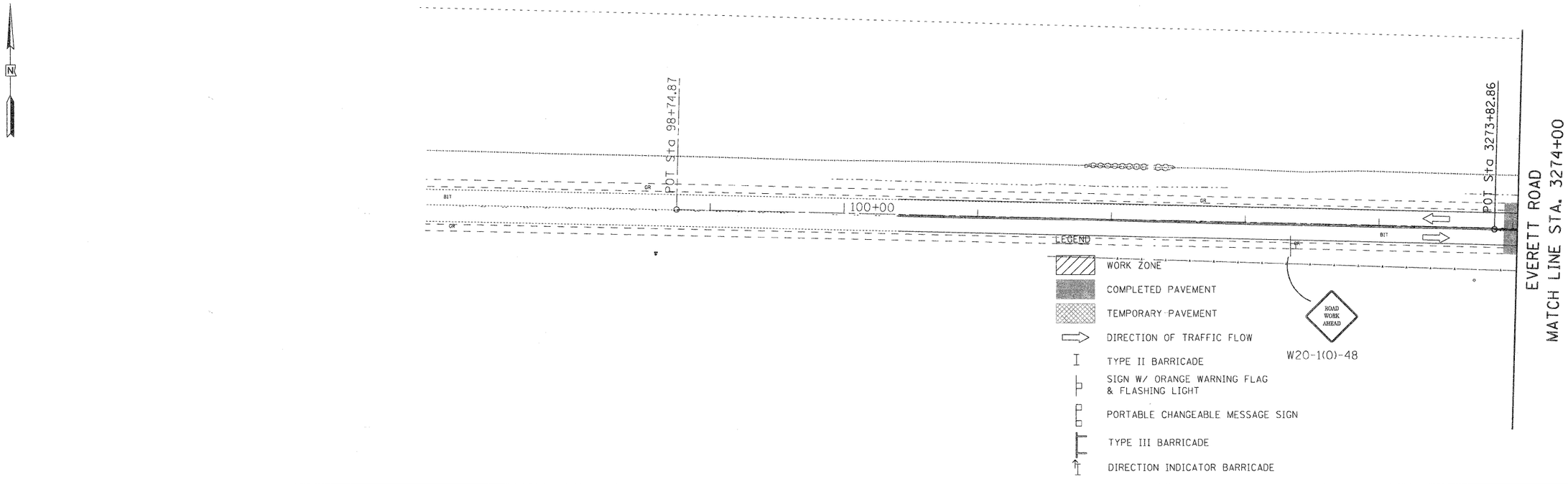
HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

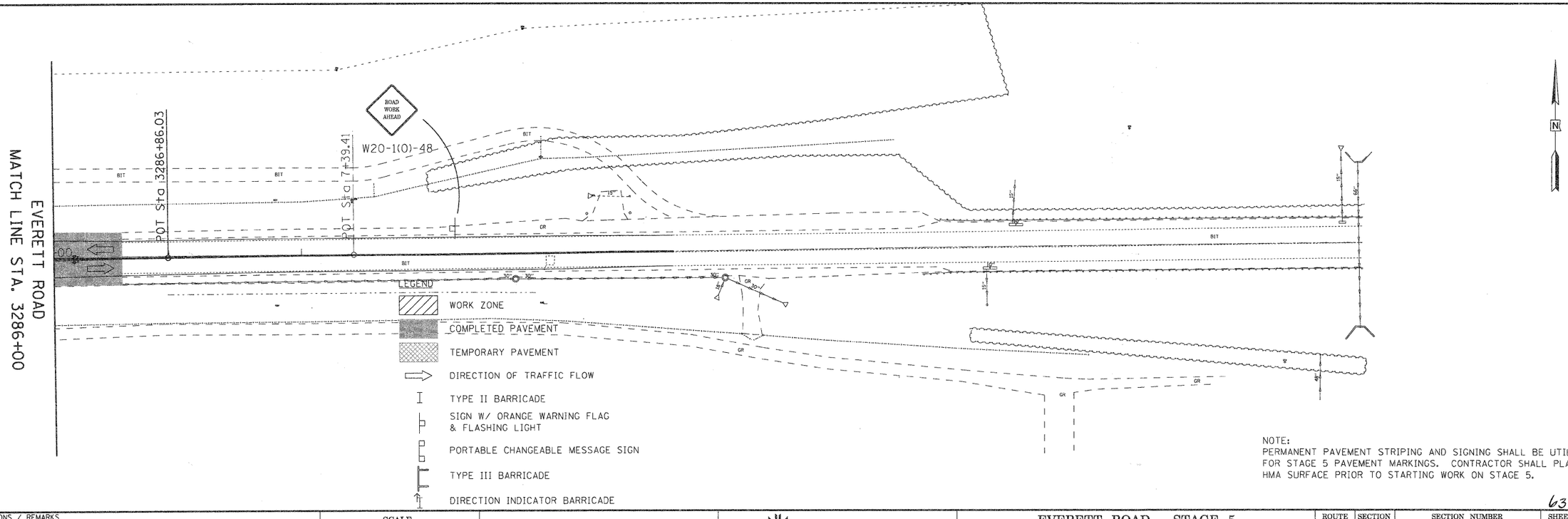
LakeCounty Division of Transportation

ROUNDABOUT - STAGE 5
TRAFFIC CONTROL PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	46	107

FILE NAME: $FILE$





NOTE:
PERMANENT PAVEMENT STRIPING AND SIGNING SHALL BE UTILIZED FOR STAGE 5 PAVEMENT MARKINGS. CONTRACTOR SHALL PLACE HMA SURFACE PRIOR TO STARTING WORK ON STAGE 5.

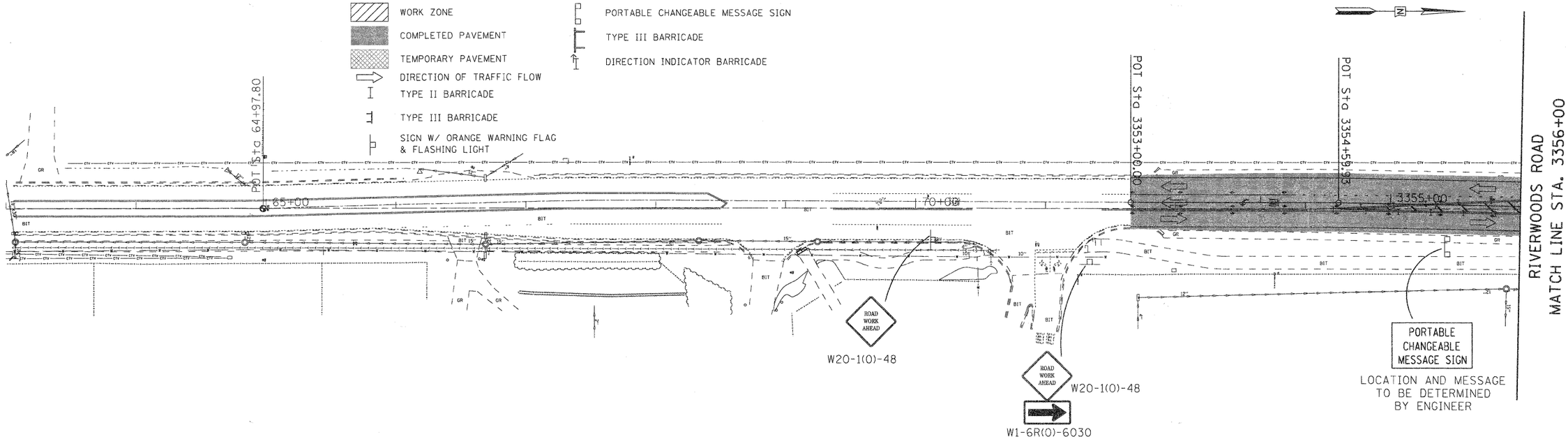
63415

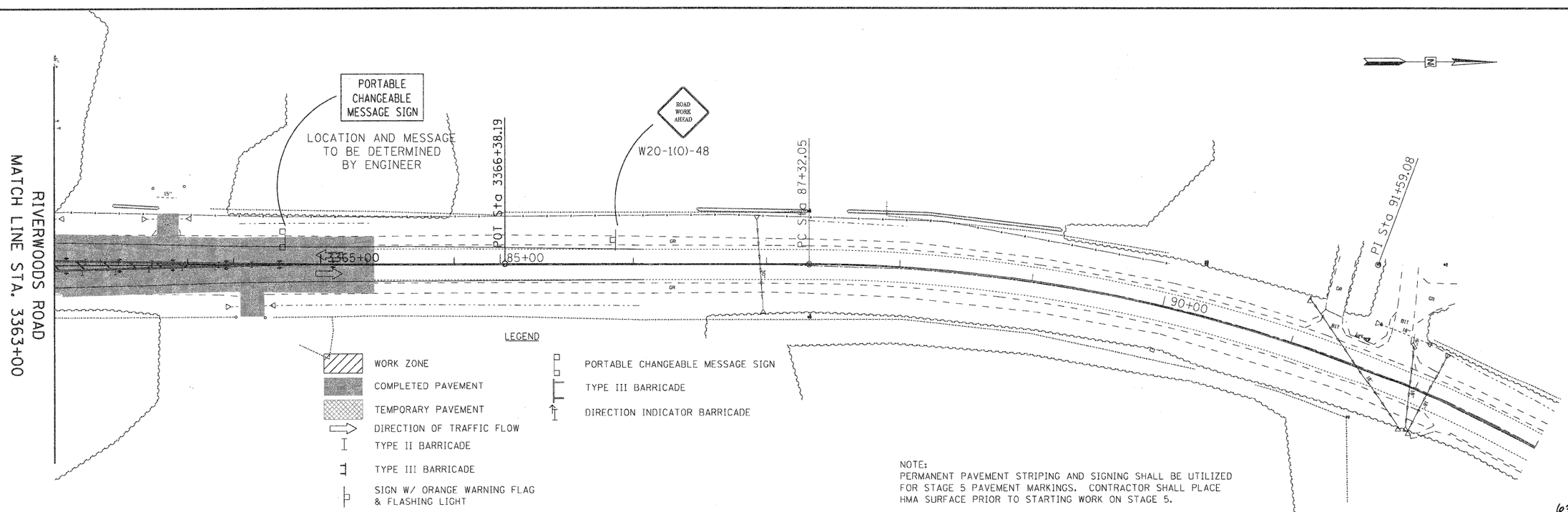
REVISIONS / REMARKS						SCALE								
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM	0 40 80	LakeCounty Division of Transportation	EVERETT ROAD – STAGE 5	ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
		/ /		CHECKED BY:	MPK/JLC			TRAFFIC CONTROL PLAN	58/52	136	04-00136-06-CH	47	107
		/ /		DATE:	1/22/2010								

FILE NAME: $FILE$

LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
- TYPE III BARRICADE
- SIGN W/ ORANGE WARNING FLAG & FLASHING LIGHT
- PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- DIRECTION INDICATOR BARRICADE





LEGEND

- WORK ZONE
- COMPLETED PAVEMENT
- TEMPORARY PAVEMENT
- DIRECTION OF TRAFFIC FLOW
- TYPE II BARRICADE
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- TYPE III BARRICADE
- DIRECTION INDICATOR BARRICADE

NOTE:
PERMANENT PAVEMENT STRIPING AND SIGNING SHALL BE UTILIZED FOR STAGE 5 PAVEMENT MARKINGS. CONTRACTOR SHALL PLACE HMA SURFACE PRIOR TO STARTING WORK ON STAGE 5.

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALE 0 40 80

LakeCounty Division of Transportation

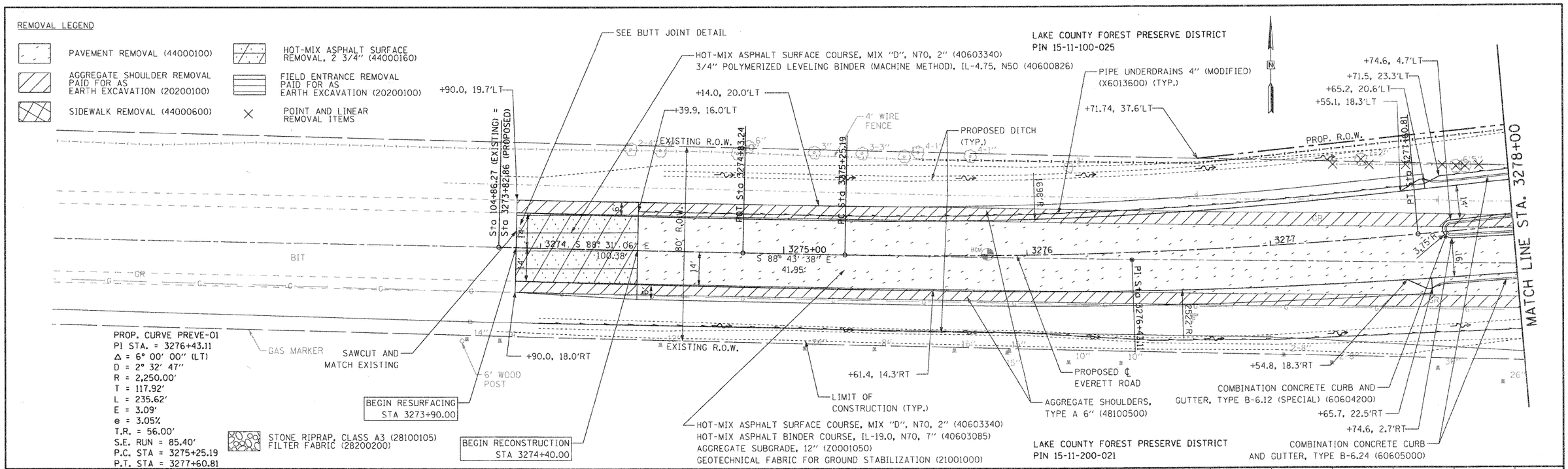
RIVERWOODS ROAD - STAGE 5
TRAFFIC CONTROL PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	48	107

FILE NAME: $FILE$

REMOVAL LEGEND

- PAVEMENT REMOVAL (44000100)
- AGGREGATE SHOULDER REMOVAL PAID FOR AS EARTH EXCAVATION (20200100)
- SIDEWALK REMOVAL (44000600)
- HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4" (44000160)
- FIELD ENTRANCE REMOVAL PAID FOR AS EARTH EXCAVATION (20200100)
- POINT AND LINEAR REMOVAL ITEMS



REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES: VERT. 2 (0); HORIZ. 0 20 40

HDR Engineering, Inc. — 30 N LaSalle Street, Suite 3220, Chicago, IL 60602, 312-443-4900

LakeCounty Division of Transportation

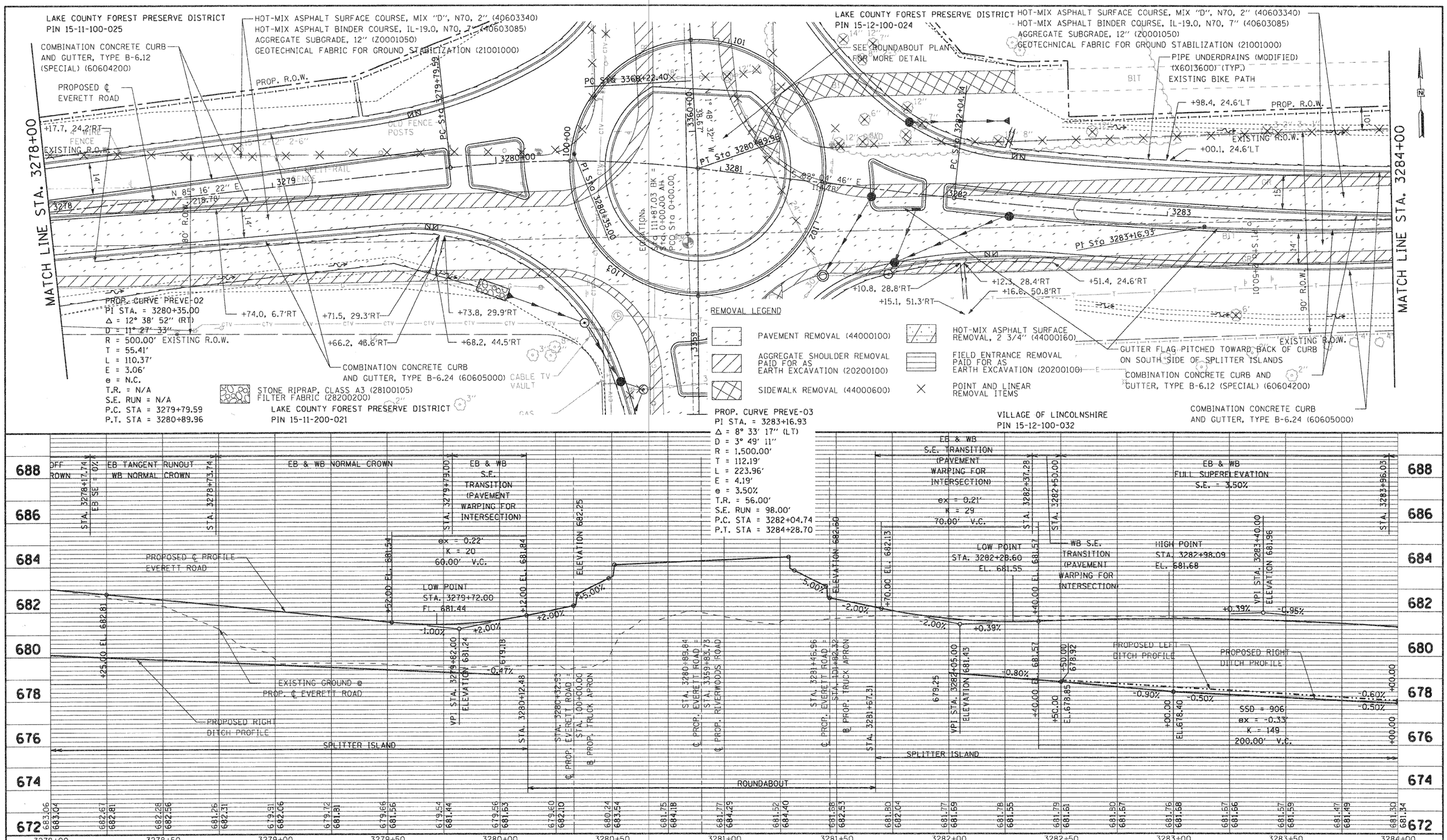
EVERETT ROAD

PLAN & PROFILE STA. 3272+00 TO STA. 3278+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	49	107

63415

FILE NAME: $FILE$



REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES HORIZ. 0 20 40 VERT. 0 2

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty Division of Transportation

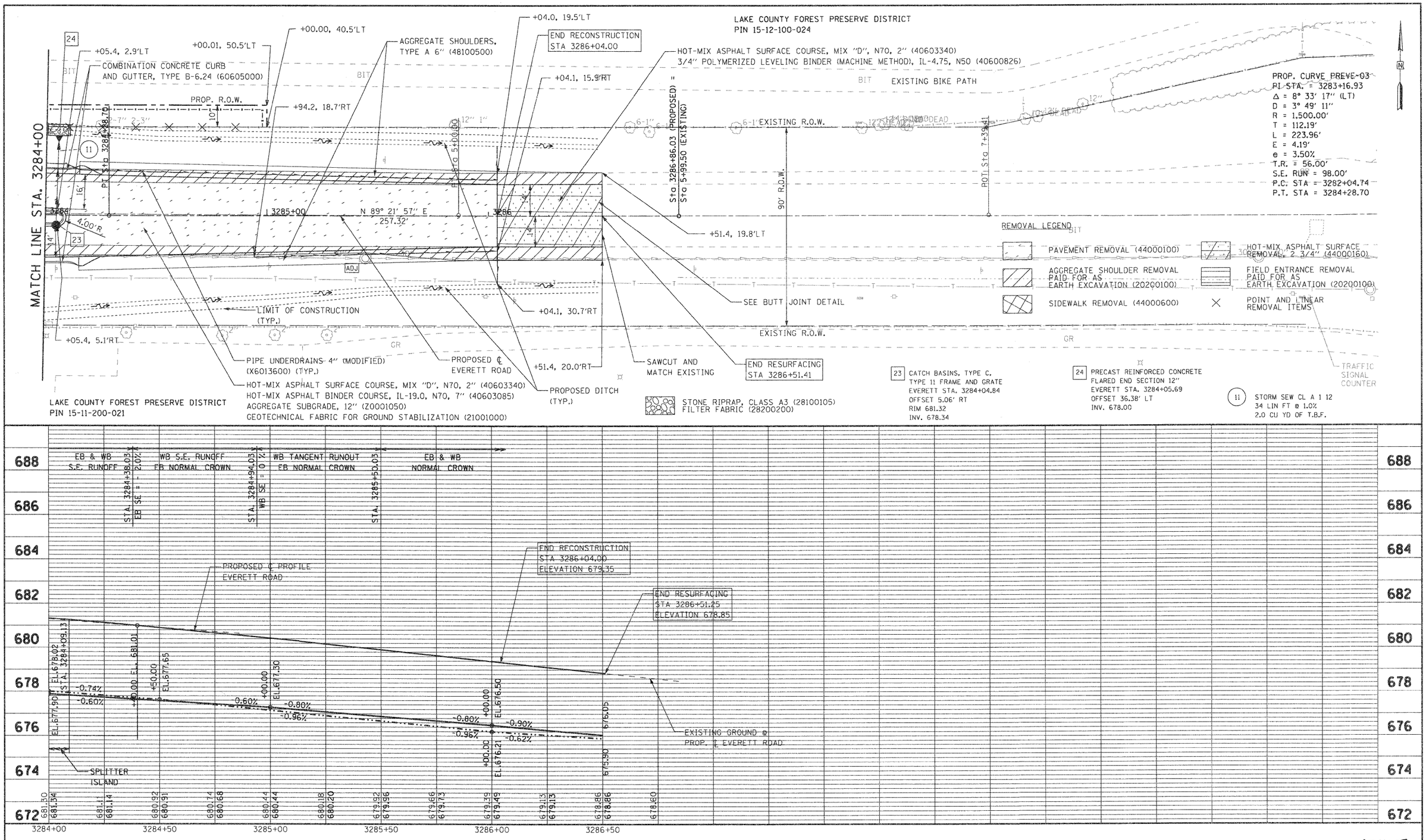
EVERETT ROAD

PLAN & PROFILE STA. 3278+00 TO STA. 3284+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	50	107

63415

FILE NAME: $FILE$



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		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

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LakeCounty
Division of Transportation

EVERETT ROAD

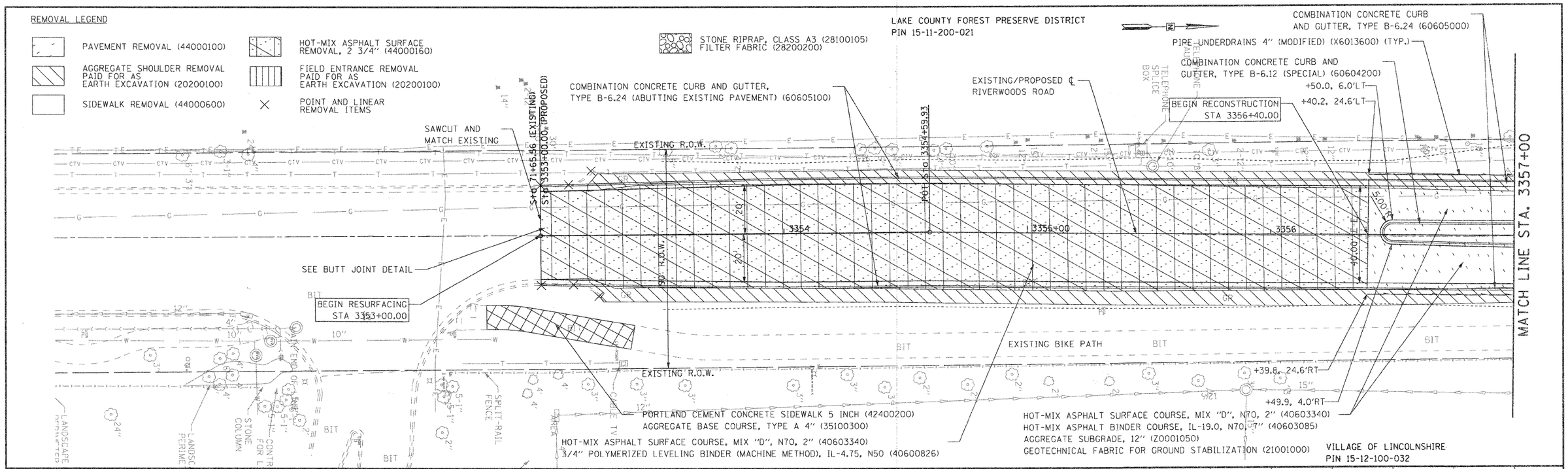
PLAN & PROFILE STA. 3284+00 TO STA. 3290+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	51	107

FILE NAME: $FILE$

REMOVAL LEGEND

- PAVEMENT REMOVAL (44000100)
- AGGREGATE SHOULDER REMOVAL PAID FOR AS EARTH EXCAVATION (20200100)
- SIDEWALK REMOVAL (44000600)
- HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4" (44000160)
- FIELD ENTRANCE REMOVAL PAID FOR AS EARTH EXCAVATION (20200100)
- POINT AND LINEAR REMOVAL ITEMS



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		/ /		DATE:	1/22/2010

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HDR Engineering, Inc. — 30 N LaSalle Street, Suite 3220, Chicago, IL 60602, 312-443-4900

LakeCounty Division of Transportation

RIVERWOODS ROAD

PLAN & PROFILE STA. 3351+00 TO STA. 3357+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	52	107

FILE NAME: $FILE$

STONE RIPRAP, CLASS A3 (28100105)
FILTER FABRIC (28200200)

REMOVAL LEGEND

- PAVEMENT REMOVAL (44000100)
- AGGREGATE SHOULDER REMOVAL PAID FOR AS EARTH EXCAVATION (20200100)
- SIDEWALK REMOVAL (44000600)
- HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4" (44000160)
- FIELD ENTRANCE REMOVAL PAID FOR AS EARTH EXCAVATION (20200100)
- POINT AND LINEAR REMOVAL ITEMS

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (60605000)

LAKE COUNTY FOREST PRESERVE DISTRICT
PIN 15-11-200-021

PIPE UNDERDRAINS 4" (MODIFIED) (X6013600) (TYP.)

EXISTING R.O.W.

+67.9, 31.4'LT

MATCH LINE STA. 3357+00

3357 N 1° 06' 17" E 6
523.80'

BIKE PATH

EXISTING R.O.W.

+53.2, 24.6'RT
+54.8, 24.6'RT
+53.2, 31.2'RT
+54.9, 31.1'RT
SEE ROUNDABOUT PLAN FOR MORE DETAIL

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL) (60604200)

LIMIT OF CONSTRUCTION (TYP.)

HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2" (40603340)
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 7" (40603085)
AGGREGATE SUBGRADE, 12" (Z0001050)
GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (21001000)

VILLAGE OF LINCOLNSHIRE
PIN 15-12-100-032

EQUATIONS:
Sta 111+87.03 BK =
Sta 0+00.00 AH
PCC Sta 0+00.00

PC Sta 3360+22.40
N 1° 48' 32" W
38.67'
PT Sta 3380+89.96
PT Sta 3380+35.00
100+00
80+00
3281
3368
3359
3361
3362
78'
81'
14'
16'
36.00 E.E.
90' R.O.W.
80' R.O.W.
3.90 R.

LAKE COUNTY FOREST PRESERVE DISTRICT
PIN 15-11-100-025

PROP. CURVE PRRIV-01
PI STA. = 3361+34.44
Δ = 1° 46' 59" (RT)
D = 0° 47' 45"
R = 7,200.00'
T = 112.04'
L = 224.06'
E = 0.87'
e = N.C.
T.R. = N/A
S.E. RUN = N/A
P.C. STA = 3360+22.40
P.T. STA = 3362+46.46

PT Sta 3361+34.44
PT Sta 3362+46.46

25 PRECAST REINFORCED CONCRETE FLARED END SECTION 15"
RIVERWOODS STA. 3362+73.00
OFFSET 35.20'LT
FLOWLINE 678.41

31 CURB CUT
RIVERWOODS STA. 3361+99.85
OFFSET 19.73' LT
EOP. ELEV. 681.43
OUTLET ELEV. 681.06

32 CURB CUT
RIVERWOODS STA. 3362+30.70
OFFSET 19.21' RT
EOP. ELEV. 681.37
OUTLET ELEV. 681.00

LAKE COUNTY FOREST PRESERVE DISTRICT
PIN 15-12-100-024

LASALLE NATIONAL BANK - TRUST # 113128
PIN 15-11-200-022

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (60605000)

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL) (60604200)

LIMIT OF CONSTRUCTION (TYP.)

+60.0, 23.2'LT
+66.0, 20.5'LT
+91.8, 2.0'LT

EXISTING R.O.W.

MATCH LINE STA. 3363+00

+60.66, 39.4'RT

EXISTING R.O.W.

PROP. R.O.W.

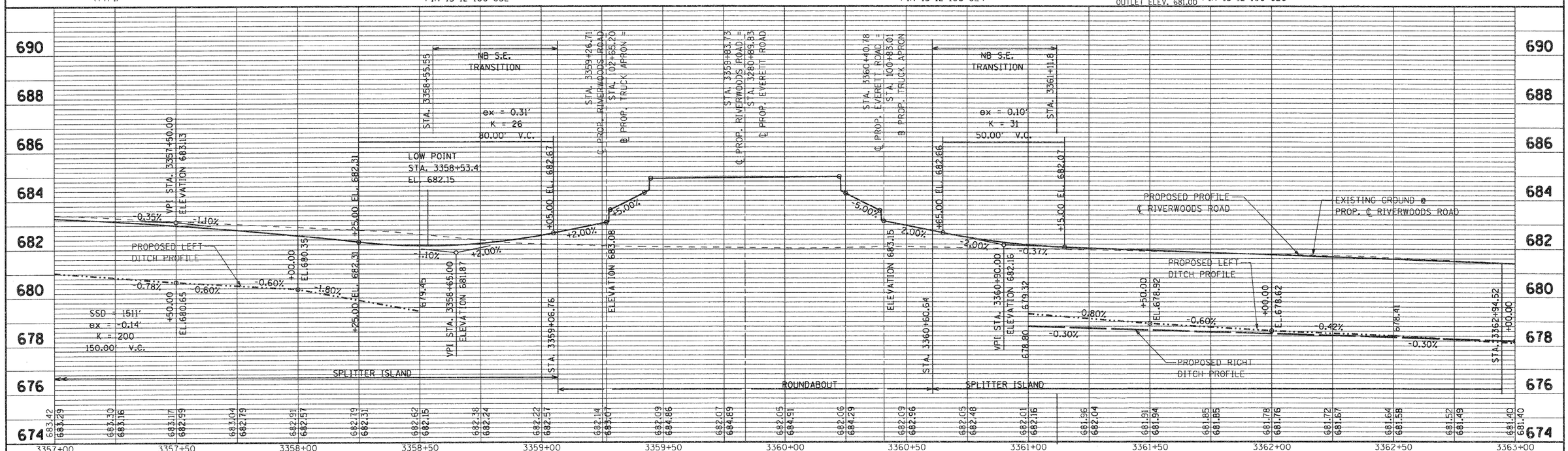
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2" (40603340)
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 7" (40603085)
AGGREGATE SUBGRADE, 12" (Z0001050)
GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (21001000)

HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2.5" (40603340)
AGGREGATE BASE COURSE, TYPE A, 6" (35100500)

AGGREGATE BASE COURSE, TYPE A, 6" (35100500)

LASALLE NATIONAL BANK - TRUST # 113128
PIN 15-12-100-026

+91.8, 4.0'RT



63415

REVISIONS / REMARKS					
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		/ /		DATE:	1/22/2010

VERT 2 0
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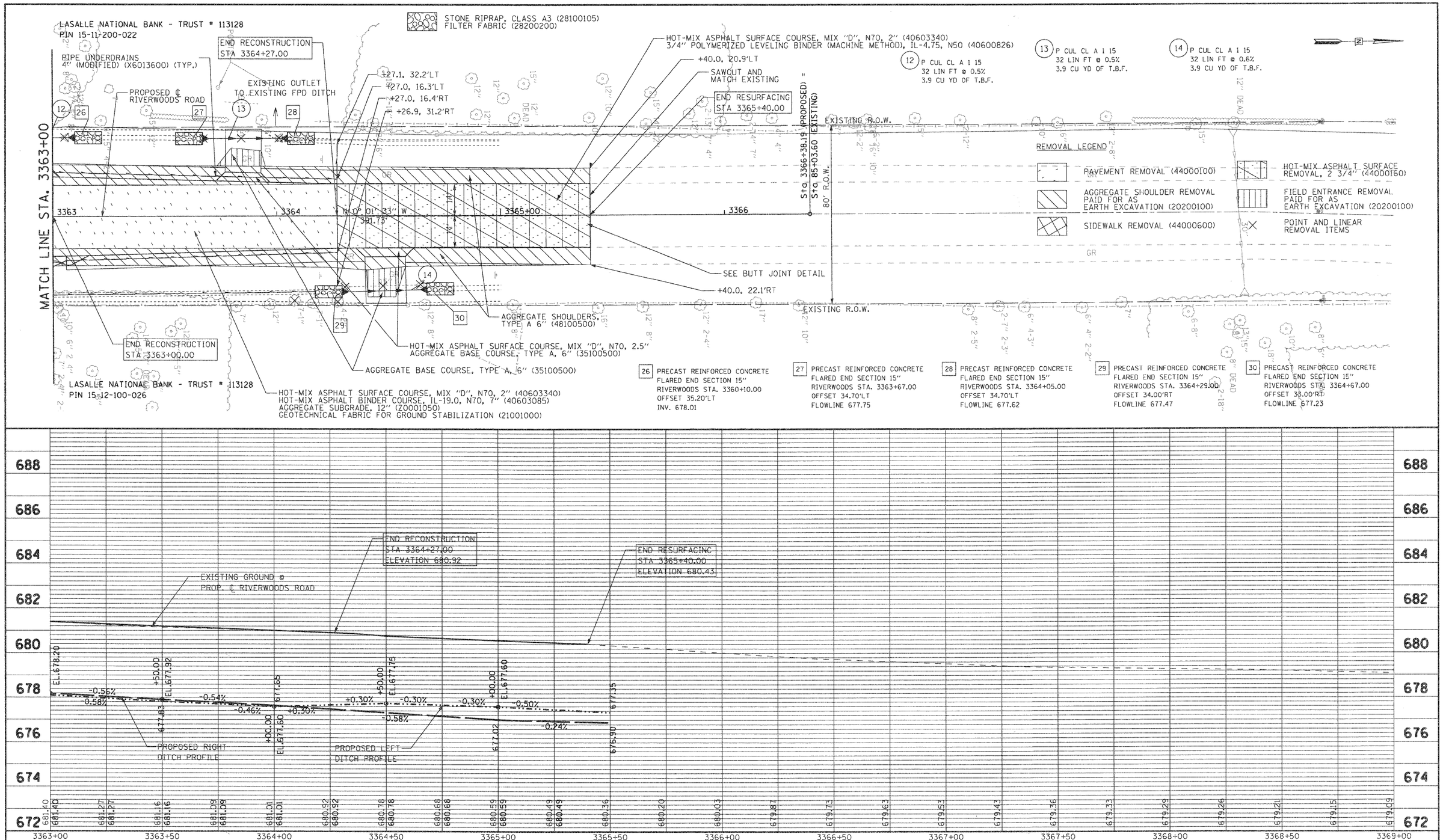
HDR
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900
HDR Engineering, Inc.

LakeCounty
Division of Transportation

RIVERWOODS ROAD
PLAN & PROFILE STA. 3357+00 TO STA. 3363+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	53	107

FILE NAME: $FILE$



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		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

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HORIZ 0 20 40

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30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

RIVERWOODS ROAD

PLAN & PROFILE STA. **3363+00** TO STA. **3369+00**

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	54	107

FILE NAME: $FILE$

1 CURB CUT
EVERETT STA. 3279+66.29
OFFSET 23.98' LT
EOP ELEV. 681.14
OUTLET ELEV. 680.77

2 CURB CUT
EVERETT STA. 3279+68.69
OFFSET 24.04' RT
EOP ELEV. 681.13
OUTLET ELEV. 680.76

3 PRECAST REINFORCED CONCRETE
FLARED END SECTION 18"
EVERETT STA. 3280+01.40
OFFSET 59.01'RT
FLOWLINE 679.18

4 MANHOLE, TYPE A, 4'-DIAMETER
TYPE 1 FRAME, CLOSED LID
RIVERWOODS STA. 3359+14.89
OFFSET 50.67'LT
RIM 682.80
INV. 678.50 (W,S)

5 CATCH BASINS, TYPE A, 5'-DIAMETER
TYPE 24 FRAME AND GRATE
[FLAT TOP SLAB]
RIVERWOODS STA. 3358+89.36
OFFSET 33.32.77' LT
RIM 682.02
INV. 677.40 (N)
INV. 677.40 (E)

5 CATCH BASINS TO BE RECONSTRUCTED
(REMOVE CONNECTION WITH PIPE
TP3 AND CONNECT PIPE 2 IN STAGE 4)

6 PRECAST REINFORCED CONCRETE
FLARED END SECTION 18"
RIVERWOODS STA. 3358+53.47
OFFSET 37.00'LT
FLOWLINE 679.45

7 MANHOLES, TYPE A, 5'-DIAMETER
TYPE 1 FRAME , CLOSED LID
[FLAT TOP SLAB]
RIVERWOODS STA. 3358+85.23
OFFSET 24.63' LT
RIM 682.10
INV. 677.30 (N)
INV. 677.40 (S)
INV. 677.28 (E; EXIST.)

7 MANHOLES TO BE RECONSTRUCTED
(REMOVE CONNECTION WITH PIPE
TP4 IN STAGE 4)

PROP. CURVE PREVE-02
PI STA. = 3280+35.00
Δ = 12° 38' 52" (RT)
D = 11° 27' 33"
R = 500.00'
T = 55.41'
L = 110.37'
E = 3.06'
e = N.C.
T.R. = N/A
S.E. RUN = N/A
P.C. STA = 3279+79.59
P.T. STA = 3280+89.96

PROP. CURVE PRRIV-01
PI STA. = 3361+34.44
Δ = 1° 46' 59" (RT)
D = 0° 47' 45"
R = 7,200.00'
T = 112.04'
L = 224.06'
E = 0.87'
e = N.C.
T.R. = N/A
S.E. RUN = N/A
P.C. STA = 3360+22.40
P.T. STA = 3362+46.46

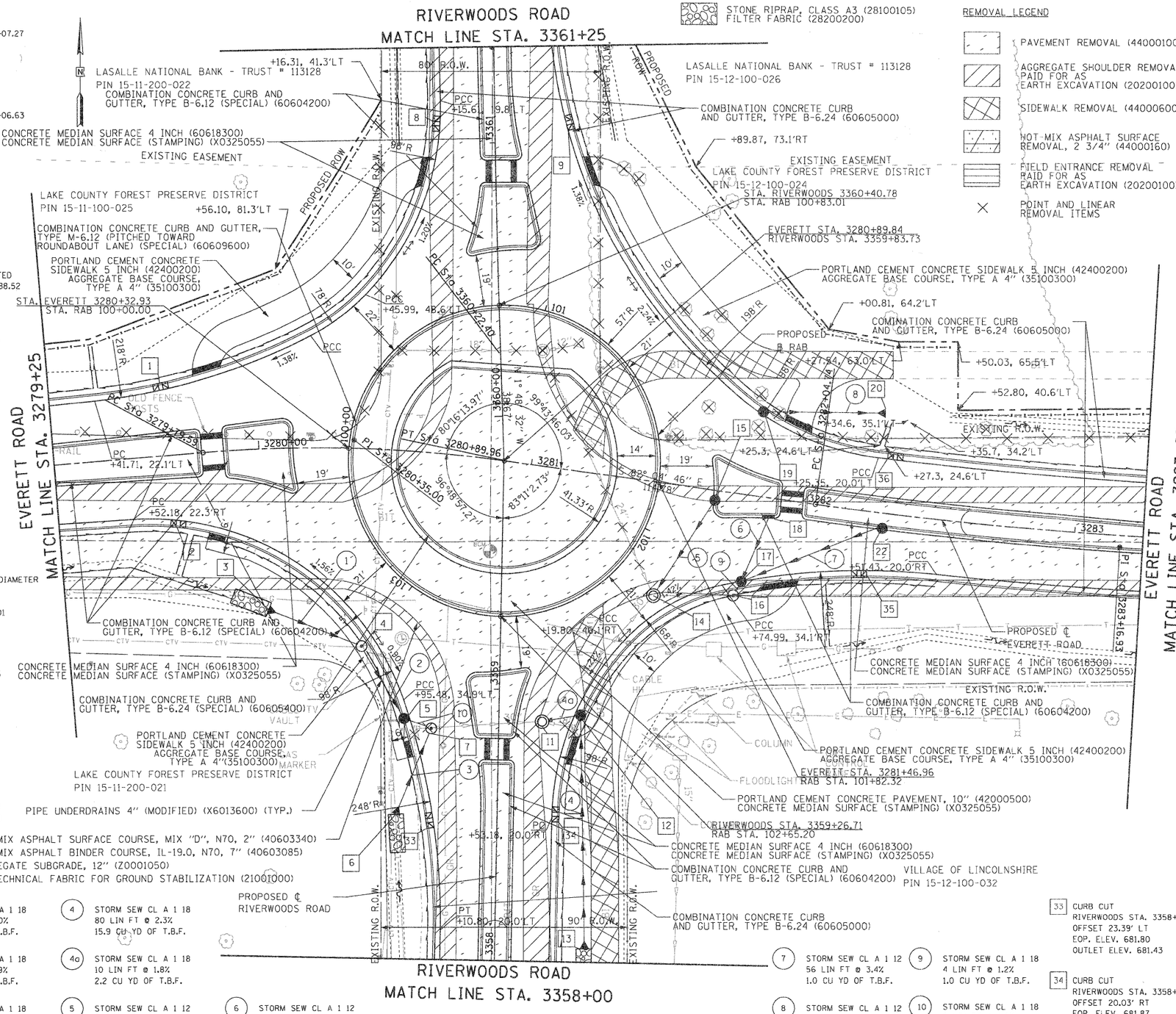
8 CURB CUT
RIVERWOODS STA. 3361+07.27
OFFSET 20.08' LT
EOP ELEV. 681.81
OUTLET ELEV. 681.44

9 CURB CUT
RIVERWOODS STA. 3361+06.63
OFFSET 26.06' RT
EOP. ELEV. 681.85
OUTLET ELEV. 681.48

11 MANHOLES TO BE ADJUSTED
RIVERWOODS STA. 3358+88.52
OFFSET 15.79' RT
RIM 682.30
INV. 677.60 (E)
INV. 677.10 (W; EXIST.)
INV. 676.90 (NE; EXIST.)

12 CATCH BASINS, TYPE A, 5'-DIAMETER
TYPE 24 FRAME AND GRATE
[FLAT TOP SLAB]
RIVERWOODS STA. 3358+92.01
OFFSET 28.02' RT
RIM 682.35
INV. 677.80 (S,W)

PROP. CURVE PREVE-03
PI STA. = 3283+16.93
Δ = 8° 33' 17" (LT)
D = 3° 49' 11"
R = 1,500.00'
T = 112.19'
L = 223.96'
E = 4.19'
e = 3.50%
T.R. = 56.00'
S.E. RUN = 98.00'
P.C. STA = 3282+04.74
P.T. STA = 3284+28.70



STONE RIPRAP, CLASS A3 (28100105)
FILTER FABRIC (28200200)

REMOVAL LEGEND

- PAVEMENT REMOVAL (44000100)
- AGGREGATE SHOULDER REMOVAL PAID FOR AS EARTH EXCAVATION (20200100)
- SIDEWALK REMOVAL (44000600)
- HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4" (44000160)
- FIELD ENTRANCE REMOVAL PAID FOR AS EARTH EXCAVATION (20200100)
- POINT AND LINEAR REMOVAL ITEMS

13 PRECAST REINFORCED CONCRETE
FLARED END SECTION 18"
RIVERWOODS STA. 3358+05.00
OFFSET 32.80' RT
FLOWLINE 679.65

14 MANHOLES TO BE ADJUSTED
ROUNDABOUT STA. 102+16.39
OFFSET 16.55' LT
RIM 682.62
INV. 678.70 (NE; PROP.)
INV. 676.67 (SW; EXIST.)
INV. 676.64 (E; EXIST.)

15 CATCH BASINS, TYPE C,
TYPE 11 FRAME AND GRATE
ROUNDABOUT STA. 101+85.00
OFFSET 20.78'LT
RIM 682.10
INV. 679.10 (S)

16 MANHOLE, TYPE A, 5'-DIAMETER
TYPE 1 FRAME, CLOSED LID
[FLAT TOP SLAB]
EVERETT STA. 3281+79.56
OFFSET 37.28'RT
RIM 682.15
INV. 677.10 (NE)
INV. 676.45 (E,W; EXIST.)

17 CATCH BASINS, TYPE A, 4'-DIAMETER
TYPE 24 FRAME AND GRATE
EVERETT STA. 3281+81.78
OFFSET 31.72' RT
RIM 681.91
INV. 677.65 (N)
INV. 677.65 (NE)
INV. 677.15 (SW)
[ECCENTRIC OPENING IN TOP ROTATED AWAY FROM EVERETT CENTERLINE]

18 INLETS, TYPE A,
TYPE 11 FRAME AND GRATE
EVERETT STA. 3281+88.66
OFFSET 7.36' RT
RIM 681.82
INV. 678.80 (S)

19 CATCH BASINS, TYPE C,
TYPE 24 FRAME AND GRATE
EVERETT STA. 3281+80.76
OFFSET 30.05' LT
RIM 681.60
INV. 679.24

20 PRECAST REINFORCED CONCRETE
FLARED END SECTION 12"
EVERETT STA. 3282+26.00
OFFSET 36.50' LT
FLOWLINE 679.05

22 CATCH BASINS, TYPE C,
TYPE 11 FRAME AND GRATE
EVERETT STA. 3282+30.00
OFFSET 6.00' RT
RIM 681.55
INV. 678.55

33 CURB CUT
RIVERWOODS STA. 3358+51.66
OFFSET 23.39' LT
EOP. ELEV. 681.80
OUTLET ELEV. 681.43

34 CURB CUT
RIVERWOODS STA. 3358+54.52
OFFSET 20.03' RT
EOP. ELEV. 681.87
OUTLET ELEV. 681.50

35 CURB CUT
EVERETT STA. 3282+23.59
OFFSET 21.88' RT
EOP. ELEV. 681.66
OUTLET ELEV. 681.29

36 CURB CUT
EVERETT STA. 3282+31.62
OFFSET 20.00' LT
EOP. ELEV. 681.08
OUTLET 680.71

(1) STORM SEW CL A 1 18
28 LIN FT @ 2.0%
4.7 CU YD OF T.B.F.

(2) STORM SEW CL A 1 18
28 LIN FT @ 3.9%
7.8 CU YD OF T.B.F.

(3) STORM SEW CL A 1 18
28 LIN FT @ 7.3%
3.5 CU YD OF T.B.F.

(4) STORM SEW CL A 1 18
80 LIN FT @ 2.3%
15.9 CU YD OF T.B.F.

(4a) STORM SEW CL A 1 18
10 LIN FT @ 1.8%
2.2 CU YD OF T.B.F.

(5) STORM SEW CL A 1 12
40 LIN FT @ 1.0%
4.2 CU YD OF T.B.F.

(6) STORM SEW CL A 1 12
24 LIN FT @ 1.0%
3.0 CU YD OF T.B.F.

(7) STORM SEW CL A 1 12
56 LIN FT @ 3.4%
1.0 CU YD OF T.B.F.

(8) STORM SEW CL A 1 12
38 LIN FT @ 0.5%
3.4 CU YD OF T.B.F.

(9) STORM SEW CL A 1 18
4 LIN FT @ 1.2%
1.0 CU YD OF T.B.F.

(10) STORM SEW CL A 1 18
8 LIN FT @ 1.0%
5.9 CU YD OF T.B.F.

REVISIONS / REMARKS					
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30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty Division of Transportation

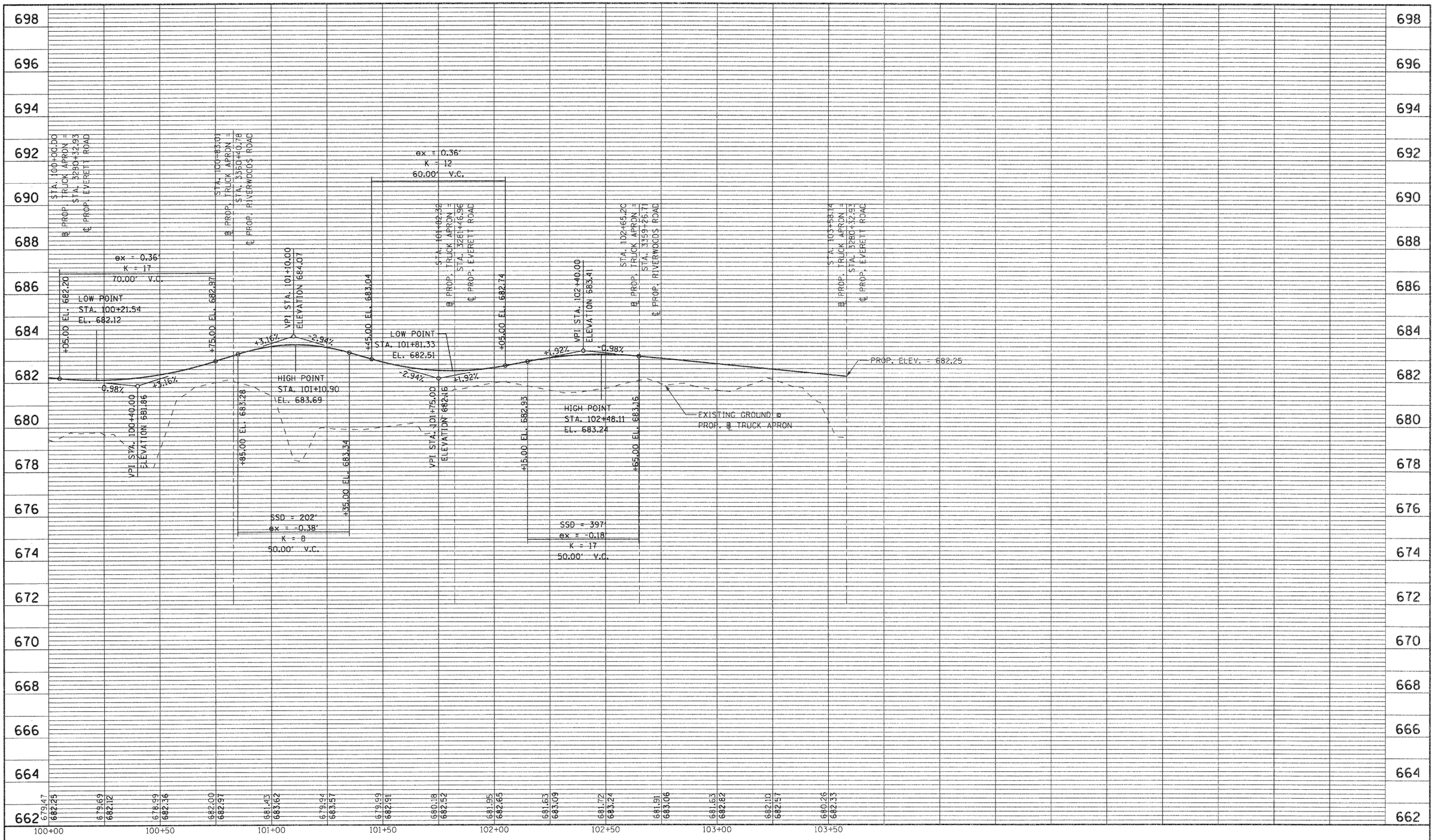
ROUNDABOUT /TRUCK APRON

PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	55	107

63415

FILE NAME:



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VERT 2 0

SCALES
HORIZ.
0 20 40

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HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

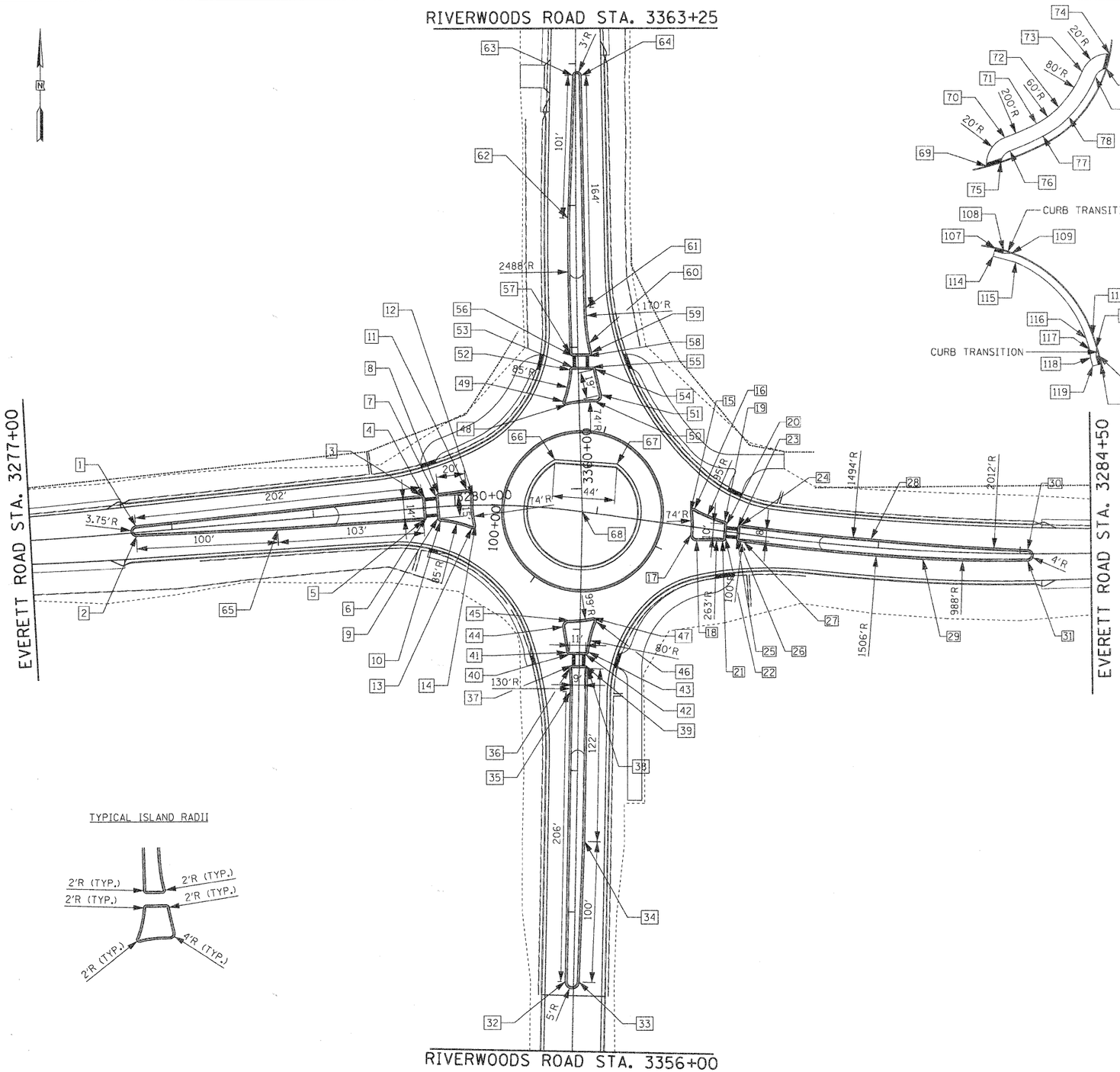
LakeCounty
Division of Transportation

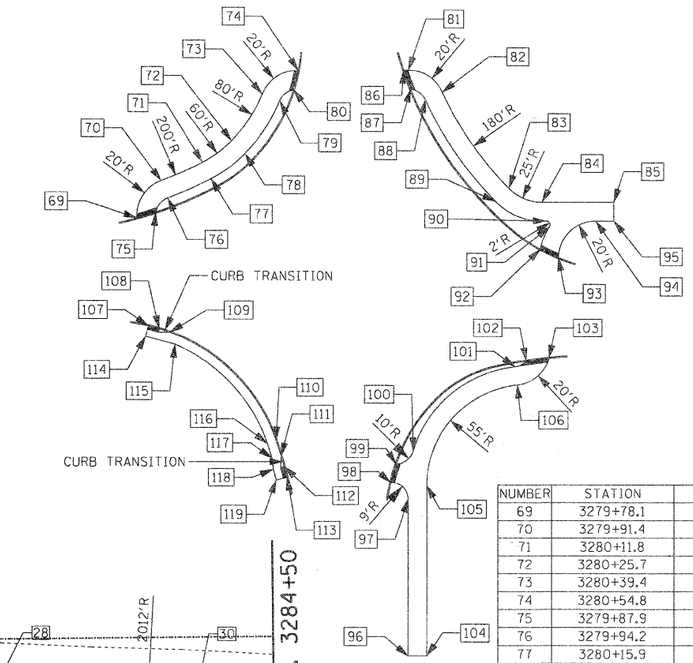
ROUNDABOUT /TRUCK APRON PROFILE

PROFILE STA. 100+00.00 TO STA. 103+58.14

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	56	107

FILE NAME: $FILE$





NUMBER	STATION	OFFSET
69	3279+78.1	28.5' LT
70	3279+91.4	47.5' LT
71	3280+11.8	56.6' LT
72	3280+25.7	68.3' LT
73	3280+39.4	94.1' LT
74	3280+54.8	107.6' LT
75	3279+87.9	30.9' LT
76	3279+94.2	38.0' LT
77	3280+15.9	47.7' LT
78	3280+32.2	61.5' LT
79	3280+47.3	90.8' LT
80	3280+53.3	97.3' LT
81	3281+05.7	114.5' LT
82	3281+25.5	105.4' LT
83	3281+68.3	58.9' LT
84	3281+86.9	54.0' LT
85	3282+25.9	59.1' LT
86	3281+03.3	114.1' LT
87	3281+08.4	104.7' LT
88	3281+17.1	100.1' LT
89	3281+62.2	50.9' LT
90	3281+88.3	44.1' LT
91	3281+92.7	41.5' LT
92	3281+89.6	29.0' LT
93	3281+99.7	25.8' LT
94	3282+17.3	48.0' LT
95	3282+27.2	49.2' LT
96	3281+49.5	198.2' RT
97	3281+38.0	114.6' RT
98	3281+27.5	107.0' RT
99	3281+29.0	96.7' RT
100	3281+37.1	88.4' RT
101	3281+85.0	35.5' RT
102	3281+90.6	31.7' RT
103	3282+02.3	28.5' RT
104	3281+59.5	196.9' RT
105	3281+46.8	105.9' RT
106	3281+87.5	45.2' RT
107	3279+79.6	29.5' RT
108	3279+85.6	31.5' RT
109	3279+91.6	33.8' RT
110	3280+57.3	92.1' RT
111	3280+61.4	100.2' RT
112	3280+64.1	105.8' RT
113	3280+66.7	111.4' RT
114	3279+77.6	35.1' RT
115	3279+94.2	40.4' RT
116	3280+51.6	94.0' RT
117	3280+55.5	101.7' RT
118	3280+56.9	107.7' RT
119	3280+59.4	113.4' RT

NUMBER	STATION	OFFSET	ELEVATION (EOP)
1	3277+74.6	4.7' LT	683.26
2	3277+74.6	2.7' RT	683.26
3	3279+77.0	8.8' LT	681.44
4	3279+79.1	6.8' LT	681.45
5	3279+77.0	8.8' RT	681.44
6	3279+79.1	6.8' RT	681.45
7	3279+87.0	7.2' LT	681.49
8	3279+88.8	9.3' LT	681.51
9	3279+87.2	8.2' RT	681.49
10	3279+88.9	10.1' RT	681.52
11	3280+08.3	10.9' LT	681.77
12	3280+12.7	6.6' LT	681.79
13	3280+11.3	16.4' RT	681.94
14	3280+14.1	14.2' RT	681.98
15	3281+65.2	10.6' LT	682.14
16	3281+67.9	12.9' LT	682.18
17	3281+67.8	5.8' RT	682.10
18	3281+72.4	9.5' RT	682.08
19	3281+90.1	7.0' LT	681.80
20	3281+91.8	5.1' LT	681.78
21	3281+90.6	7.2' RT	681.79
22	3281+92.4	5.1' RT	681.75
23	3281+99.9	3.9' LT	681.69
24	3282+01.9	6.0' LT	681.67
25	3282+00.4	4.2' RT	681.68
26	3282+02.4	6.1' RT	681.64
27	3282+05.7	6.0' RT	681.64
28	3282+94.4	6.0' LT	681.68
29	3283+31.8	6.0' RT	681.65
30	3284+05.4	2.9' LT	681.30
31	3284+05.4	5.1' RT	681.30
32	3356+50.0	6.0' LT	683.48
33	3356+49.9	4.0' RT	683.48
34	3357+50.0	6.0' RT	682.99
35	3358+55.5	6.0' LT	682.15
36	3358+71.8	7.0' LT	682.21
37	3358+74.0	5.0' LT	682.24
38	3358+72.0	6.0' RT	682.22
39	3358+74.0	4.0' RT	682.23
40	3358+82.0	7.1' LT	682.31
41	3358+83.3	9.0' LT	682.34
42	3358+82.0	4.3' RT	682.31
43	3358+83.9	6.3' RT	682.33
44	3359+01.5	12.2' LT	682.59
45	3359+06.1	7.8' LT	682.68
46	3359+05.6	11.3' RT	682.68
47	3359+08.2	9.0' RT	682.80
48	3360+59.1	9.0' LT	682.73
49	3360+61.8	11.3' LT	682.72
50	3360+60.9	11.3' RT	682.98
51	3360+65.7	15.8' RT	682.65
52	3360+84.0	5.9' LT	682.28
53	3360+85.8	3.9' LT	682.25
54	3360+84.0	12.1' RT	682.28
55	3360+85.6	10.2' RT	682.25
56	3360+93.8	3.6' LT	682.15
57	3360+95.8	5.5' LT	682.14
58	3360+93.6	7.6' RT	682.15
59	3360+96.0	9.6' RT	682.14
60	3361+02.6	8.2' RT	682.12
61	3361+27.9	6.3' RT	682.02
62	3361+91.1	5.8' LT	681.79
63	3362+91.8	2.0' LT	681.42
64	3362+91.8	4.0' RT	681.42
65	3278+74.0	6.7' RT	682.32
66	3360+20.8	18.2' LT	683.75
67	3360+16.3	25.5' RT	684.94
68	EVE 3280+89.84=	0'	
	RIV 3359+83.73	0'	

NOTE: ALL SIDEWALK STATIONS AND OFFSETS REFER TO ℄ EVERETT ROAD

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALE 0 40 80

HDR Engineering, Inc. — 30 N LaSalle Street, Suite 3220, Chicago, IL 60602, 312-443-4900

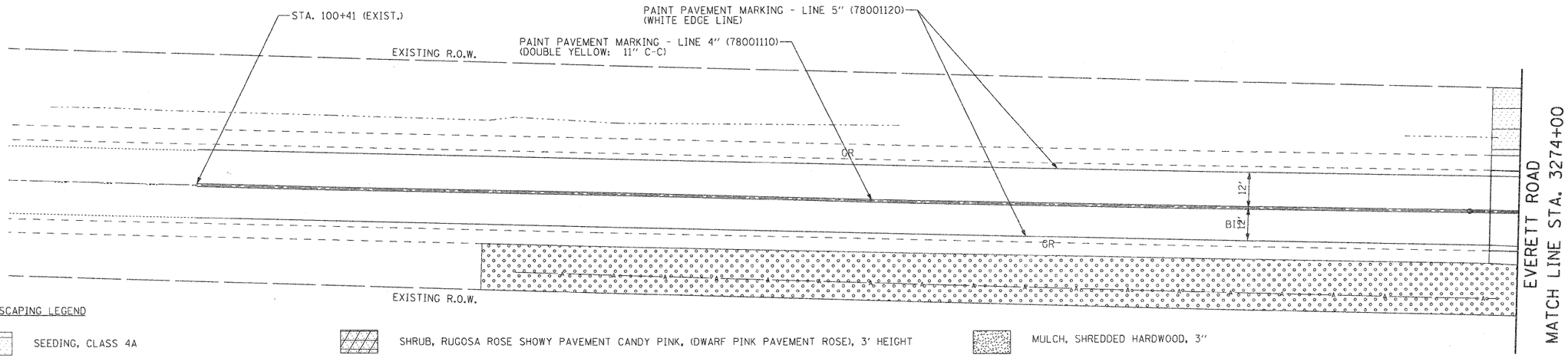
LakeCounty Division of Transportation

ROUNDABOUT

DETAILS

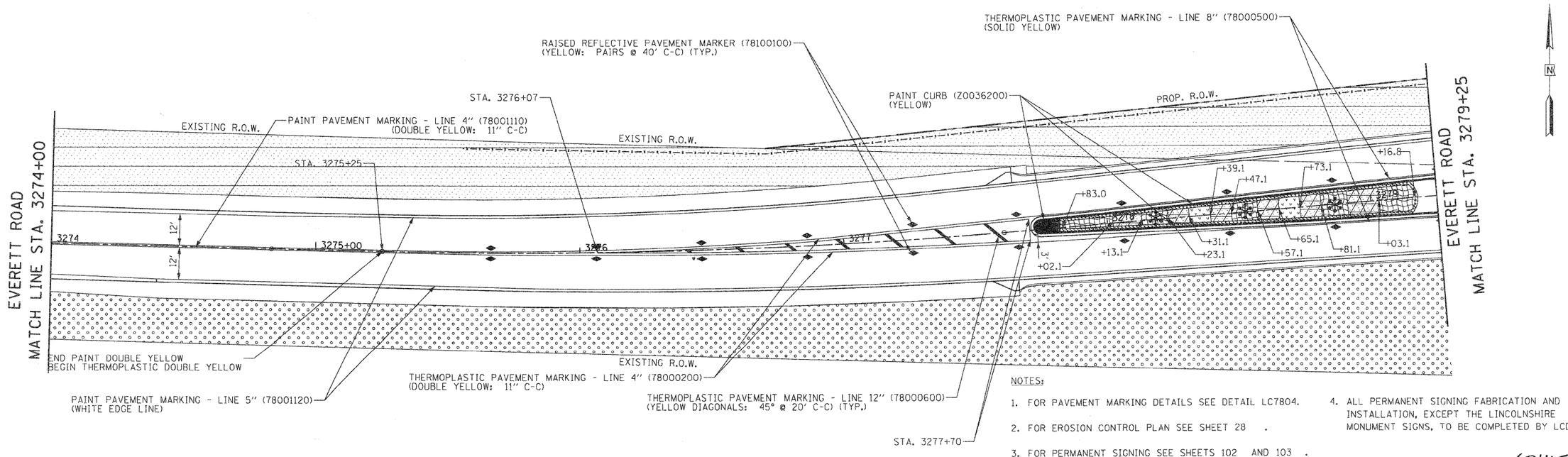
ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	57	107

FILE NAME:



LANDSCAPING LEGEND

- SEEDING, CLASS 4A
- SEEDING, CLASS 2A
- NEPATA WALKERS LOW (WALKERS LOW CATMINT)
- MULCH, SHREDDED LEAF, 3"
- SHRUB, RUGOSA ROSE SHOWY PAVEMENT CANDY PINK, (DWARF PINK PAVEMENT ROSE), 3' HEIGHT
- CALAMAGROSTIS X ACUTIFLORA KARL FOERSTER (FEATHER REED GRASS)
- BERBERIS THUNBERGII, (CRIMSON PYGMY BARBERRY), 2' HEIGHT
- SHRUB, ROSA X PINK KNOCKOUT, (PINK KNOCKOUT ROSE), 1' HEIGHT
- MULCH, SHREDDED HARDWOOD, 3"
- TREE, ULMUS ACCOLADE, (ACCOLADE ELM), BALLED AND BURLAPPED
- TREE, PYRUS CALLERYANA ARISTOCRAT, (ARISTOCRAT PEAR), BALLED AND BURLAPPED
- TREE, MALUS BEESON, (MAY'S DELIGHT), BALLED AND BURLAPPED
- MONUMENT SIGN (SEE SHEET 105 FOR DETAIL)



NOTES:

1. FOR PAVEMENT MARKING DETAILS SEE DETAIL LC7804.
2. FOR EROSION CONTROL PLAN SEE SHEET 28 .
3. FOR PERMANENT SIGNING SEE SHEETS 102 AND 103 .
4. ALL PERMANENT SIGNING FABRICATION AND INSTALLATION, EXCEPT THE LINCOLNSHIRE MONUMENT SIGNS, TO BE COMPLETED BY LCDOT.

63415

REVISIONS / REMARKS					
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		/ /		DATE:	1/22/2010

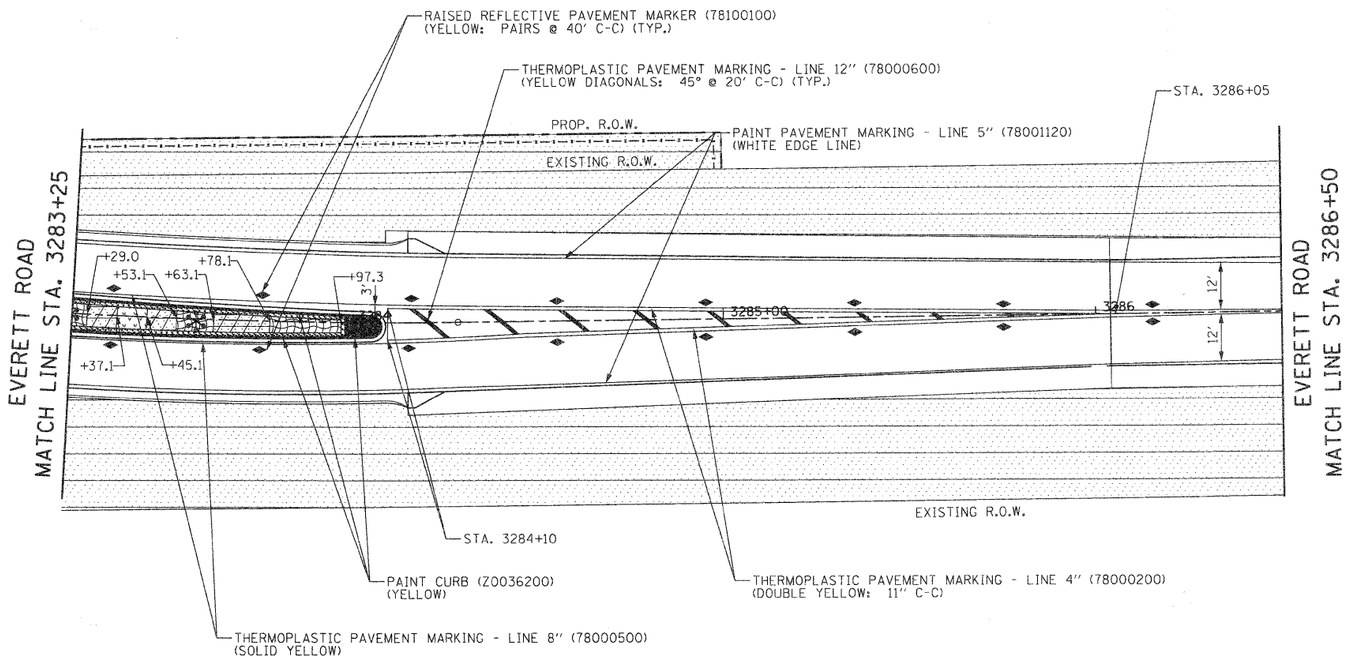
SCALE 0 20 40

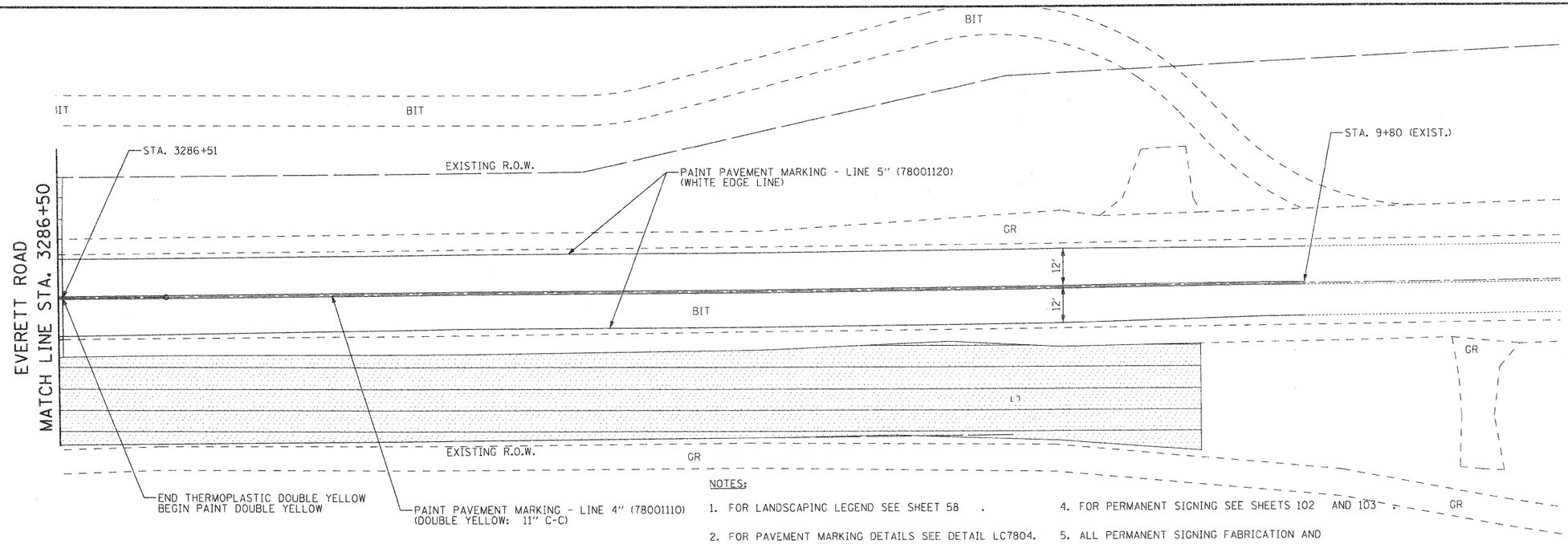
HDR Engineering, Inc. — 30 N LaSalle Street, Suite 3220, Chicago, IL 60602, 312-443-4900

LakeCounty Division of Transportation

EVERETT ROAD W LEG	ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
PAVEMENT MARKING AND LANDSCAPING PLAN	58/52	136	04-00136-06-CH	58	107

FILE NAME: $FILE$





NOTES:

1. FOR LANDSCAPING LEGEND SEE SHEET 58 .
2. FOR PAVEMENT MARKING DETAILS SEE DETAIL LC7804.
3. FOR EROSION CONTROL PLAN SEE SHEET 28 .
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		/ /		DATE:	1/22/2010

SCALE 0 20 40

HDR Engineering, Inc. — 30 N LaSalle Street, Suite 3220, Chicago, IL 60602, 312-443-4900

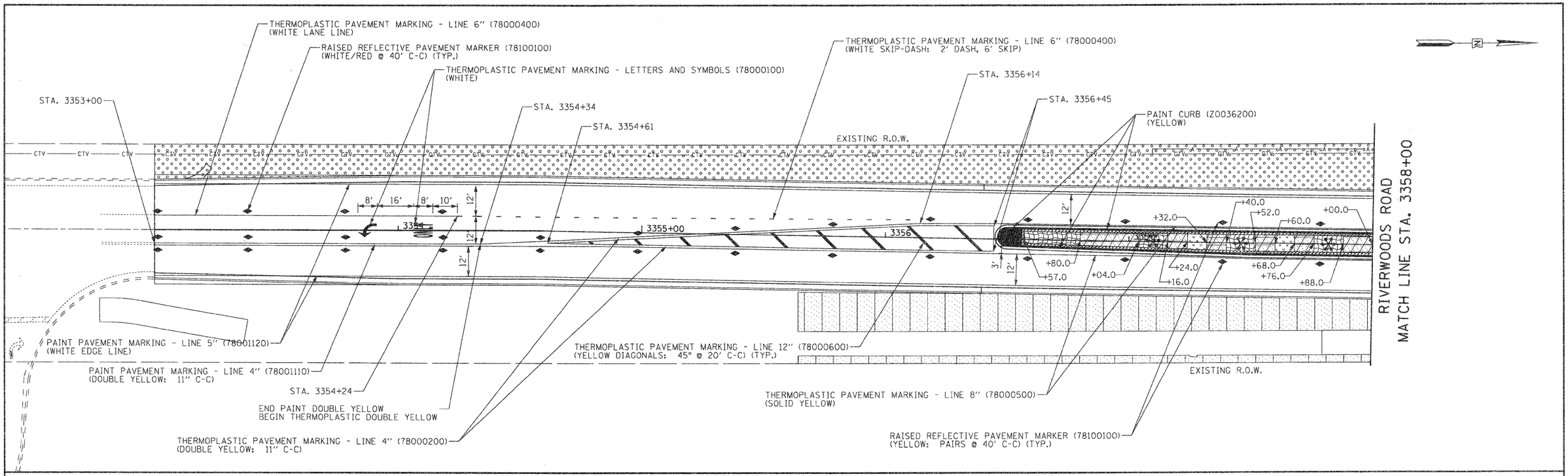
LakeCounty Division of Transportation

EVERETT ROAD E LEG

PAVEMENT MARKING AND LANDSCAPING PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	59	107

FILE NAME: $FILE$



NOTES:

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SCALE 0 20 40

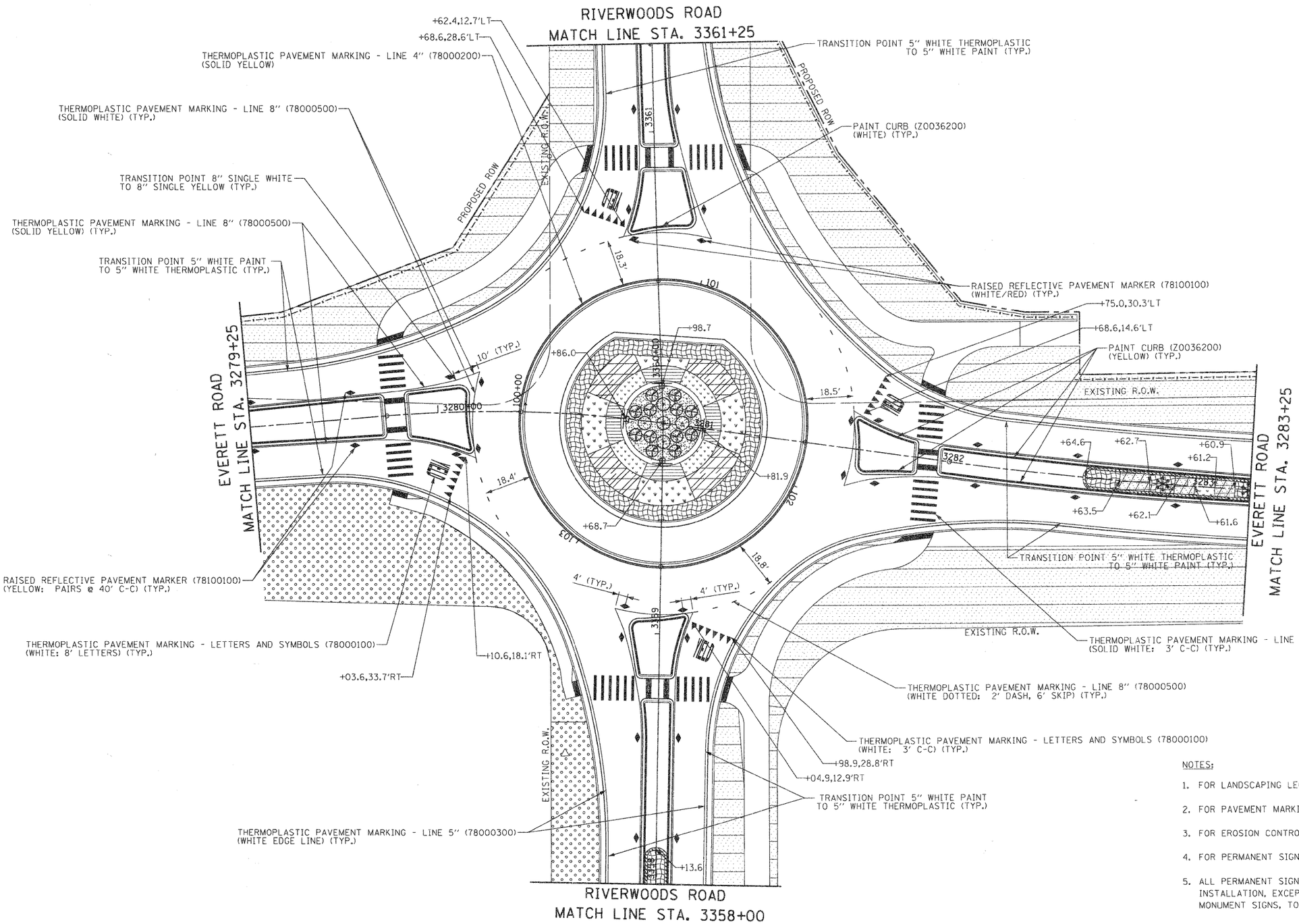
HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty Division of Transportation

RIVERWOODS ROAD
PAVEMENT MARKING AND LANDSCAPING PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	60	107

FILE NAME: $FILE$



NOTES:

1. FOR LANDSCAPING LEGEND SEE SHEET 58 .
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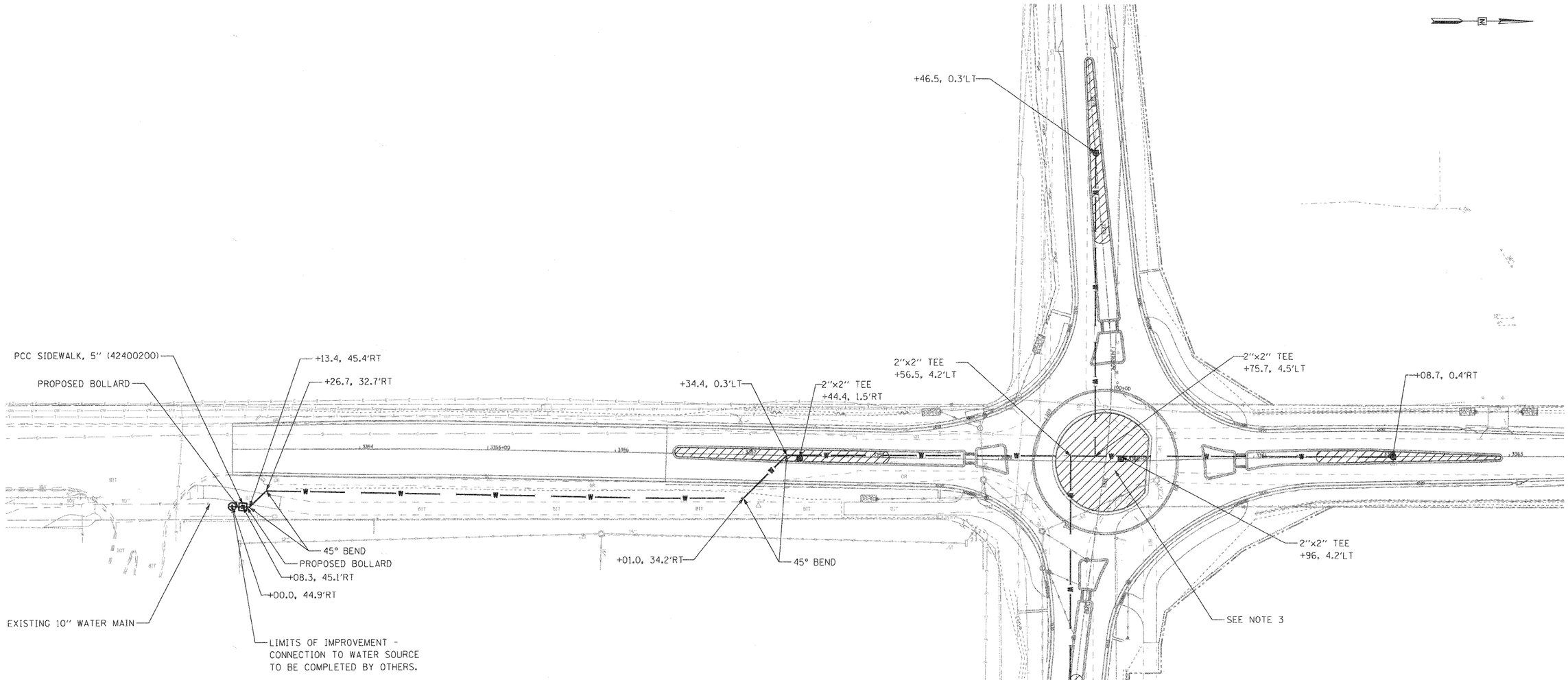
LakeCounty Division of Transportation

ROUNDABOUT
PAVEMENT MARKING AND LANDSCAPING PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
58/52	136	04-00136-06-CH	61	107

FILE NAME: $FILE$



IRRIGATION LEGEND:

- WATER SERVICE LINE 2" (56200700)
- CURB STOPS 2" (Z0015300)
  CURB BOX (XX003487)
- BACKFLOW PREVENTER, 2" (XX003710) (SEE DETAIL SHEET 107)
- 2" OUTLET FOR IRRIGATION CONNECTION (CAPPED)
- DRIP IRRIGATION SYSTEM COVERAGE AREA

NOTES:

1. SEE SHEET 107 FOR BACKFLOW PREVENTER, ENCLOSURE, BOLLARDS, AND TRENCH DETAILS.
2. DEFLECT PIPE AS NEEDED.
3. ELECTRICAL SERVICE TO BE PROVIDED BY OTHERS AT PROPOSED LOCATION OF IRRIGATION CONTROLLER.

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
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		/ /		DATE:	1/22/2010

SCALE 0 40 80

HDR Engineering, Inc. — 30 N LaSalle Street, Suite 3220, Chicago, IL 60602, 312-443-4900

LakeCounty Division of Transportation

IRRIGATION SYSTEM

PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	62	107

FILE NAME:

ABBREVIATIONS

A	AMPS
DIA	DIAMETER
C	CONDUIT
CCTV	CLOSED CIRCUIT TELEVISION
DCO	DUPLEX CONVENIENCE OUTLET
GND	GROUND
FT	FEET
HPS	HIGH PRESSURE SODIUM
IDOT	ILLINOIS DEPARTMENT OF TRANSPORTATION
LT	LEFT
MH	MOUNTING HEIGHT
P	PUSHED
PC	PHOTOCELL CONTROL
PH	PHASE
PTZ	PAN / TILT / ZOOM
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANIZED STEEL
RT	RIGHT
STA	STATION
UNO	UNLESS NOTED OTHERWISE
V	VOLTS
W	WATTS
W	WIRES

GENERAL NOTES - ROADWAY LIGHTING

1. SPLICING OF CONDUCTORS SHALL BE IN POLE BASES OR WEATHER TIGHT JUNCTION BOXES ONLY. SPLICES BELOW GRADE WILL NOT BE PERMITTED.
2. LIGHTING CIRCUITS SHALL BE WIRED IN ACCORDANCE WITH THE PLANS. DEVIATIONS WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ENGINEER.
3. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO RESTORE ANY SPECIALIZED LANDSCAPING (DECORATIVE ROCKS, PLANTS, ETC.).
4. ALL WORK SHALL CONFORM TO THE LATEST LAKE COUNTY DOT, IDOT, IDOT DISTRICT 1 STANDARDS, SPECIAL PROVISIONS, SUPPLEMENTAL SPECIFICATIONS, THE NATIONAL ELECTRICAL CODE, AND THE NATIONAL ELECTRICAL SAFETY CODE.
5. BURIED UTILITY LOCATIONS SHOWN ON THE PLAN SHEETS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES BEFORE STARTING WORK.
6. ALL ELECTRICAL EQUIPMENT SHALL BE UL LISTED AND LABELED.
7. ALL CONDUITS SHALL BE SEALED.
8. ALL CIRCUIT WIRES SHALL BE LABELED WITH CIRCUIT IDENTIFICATION.
9. ALL LAMPS SHALL BE 250W HPS AND SHALL BE FURNISHED AS PART OF THE CONTRACT.
10. CIRCUITS SHALL BE TESTED PER SPECIFICATION.
11. THE LOCATIONS OF ALL PROPOSED EQUIPMENT ARE ILLUSTRATED DIAGRAMMITICALLY. THE ACTUAL LOCATION IN THE FIELD SHALL MEET THE APPROVAL OF THE ENGINEER.
12. ALL MEASUREMENTS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY MEASUREMENTS IN THE FIELD.
13. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTING INSTALLATIONS AND DATA PRIOR TO BIDDING.
14. THE CONTRACTOR MUST MAINTAIN SAFE EQUIPMENT AND WORKING CLEARANCES FROM THE EXISTING COMED OVERHEAD ELECTRIC LINES. THE CONTRACTOR SHALL PLAN HIS WORK CONSIDERING COMED'S LINES TO BE IN SERVICE AND ENERGIZED THROUGHOUT THE CONSTRUCTION PERIOD.
15. GROUNDING CONDUCTORS SHALL BE CONTINUOUS.
16. ALL NEW UNIT DUCTS AND UNDERGROUND CONDUITS SHALL BE PLACED A MINIMUM OR 30" BENEATH THE GROUND SURFACE (FINAL GRADE), UNLESS NOTED OTHERWISE.

ROADWAY LIGHTING SHEET INDEX

SHEET NO.	TITLE
LT-01	GENERAL NOTES, LEGEND, SHEET INDEX
LT-02	SCHEDULE OF QUANTITIES
LT-03	PROPOSED LIGHTING PLAN
LT-04	PROPOSED LIGHTING PLAN
LT-05	WIRING DIAGRAM

DETAILS

SHEET NO.	IDOT DIST 1 DETAIL NO.	TITLE
LT-06	-	PTZ CAMERA & WIRELESS TRANSMISSION DETAILS
LT-07	BE-215*	LIGHTING CONTROLLER "A" SINGLE DOOR
LT-07A	-	LIGHTING CONTROLLER "LINCOLNSHIRE"
LT-08	BE-220	ELECTRIC SERVICE INSTALLATION, AERIAL, REMOTE DISCONNECT
LT-09	BE-301	LIGHT POLE FOUNDATION, 40' TO 47'-6"
LT-10	BE-702	MISC. DETAILS, SHEET A - CABLE SPLICE, POLE WIRING, TRENCH DETAIL

* MODIFIED

ROADWAY LIGHTING LEGEND

DESCRIPTION	PROPOSED	EXISTING
LIGHT UNIT HPS 250W, 30' MH, 8' SINGLE MAST ARM A - CIRCUIT A 1 - POLE #1	A1	
LIGHTING CONTROLLER		
UNIT DUCT		
RIGID GALVANIZED STEEL CONDUIT, PUSHED CONTAINING PULLED-IN UNIT DUCT		
CONDUIT, IN TRENCH		
RIGHT OF WAY		
GROUND ROD		
ELEC UTILITY POLE		
PTZ CAMERA		
LED ACCENT LIGHT FIXTURE, 120V		

LT-01

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	DL
		/ /		CHECKED BY:	IB
		/ /		DATE: 01/22/10	

FILE NAME:

SPAAN Tech, Inc. 311 South Wacker Drive, Suite 2400 Chicago, Il 60606 phone: 312.377.8800 fax: 312.377.8802 web: www.SpaanTech.com

HDR Engineering, Inc. 30 N LaSalle Street, Suite 3220 Chicago, IL 60602 312-443-4900

LakeCounty Division of Transportation

RIVERWOODS AND EVERETT ROADS
GENERAL NOTES, LEGEND, AND SHEET INDEX

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	63	107

LCDOT - RIVERWOODS AND EVERETT RDS.
FINAL PAY ITEM LIST / OPINION OF PROBABLE CONSTRUCTION COST
LIGHTING & CCTV

SP	CODE #	ITEM	UNIT	100% LCDOT	100% LINCOLN-SHIRE	TOTAL
	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1	1	2
	80400200	ELECTRIC UTILITY SERVICE CONNECTION	EACH	1	1	2
	81000100	CONDUIT IN TRENCH, 1/2" DIA., GALVANIZED STEEL	FOOT		100	100
	81000300	CONDUIT IN TRENCH, 1" DIA., GALVANIZED STEEL	FOOT		350	350
	81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	100	100	200
	81017510	CONDUIT IN TRENCH, 1" DIA., COILABLE NONMETALLIC CONDUIT	FOOT	305		305
	81018200	CONDUIT PUSHED, 1" DIA., GALVANIZED STEEL	FOOT		135	135
	81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	330		330
	81018700	CONDUIT PUSHED, 3" DIA., GALVANIZED STEEL	FOOT	330		330
	81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	20		20
	81603165	UNIT DUCT, 600V, 3-1C NO.6, 1/C NO.6 GROUND, (EPR-TYPE RHW), 1" DIA. POLYETHYLENE	FOOT	2870		2870
	81700105	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 12	FOOT		300	300
	81700110	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 1/C NO. 10	FOOT	945	900	1845
		ELECTRIC CABLE IN CONDUIT, BARE, 1/C NO. 6 SOLID	FOOT	25		25
	81701315	ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE USE) 3-1/C NO. 2	FOOT	300	300	600
	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	2320	235	2555
	82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	18		18
	82102310	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 310 WATT	EACH	2		2
*		LED ACCENT LIGHT	EACH		8	8
	82500350	LIGHTING CONTROLLER, BASE MOUNTED, 240 VOLT, 100 AMP	EACH	1	1	2
	83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	140		140
*	LC800351	LIGHT POLE, STEEL, SPECIAL I	EACH	18		18
*	LC800352	LIGHT POLE, STEEL, SPECIAL II	EACH	2		2
*	LC800557	WIRELESS TRANSMISSION SYSTEM	EACH	1		1
*	LC800607	OUTDOOR RATED NETWORK CABLE	FOOT	60		60
*		CCTV FIELD TERMINAL CABINET	EACH	1		1
*		REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1		1
*		GROUND ROD, 5/8" DIA. X 10 FT.	EACH	16		16
*		MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6		6

63415 LT-02

REVISIONS / REMARKS					
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		/ /		DATE: 01/22/10	

FILE NAME:

SPAAN Tech, Inc.
311 South Wacker Drive, Suite 2400
Chicago, Il 60606
phone: 312.577.4000
fax: 312.277.6008
web: www.SpaanTech.com

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

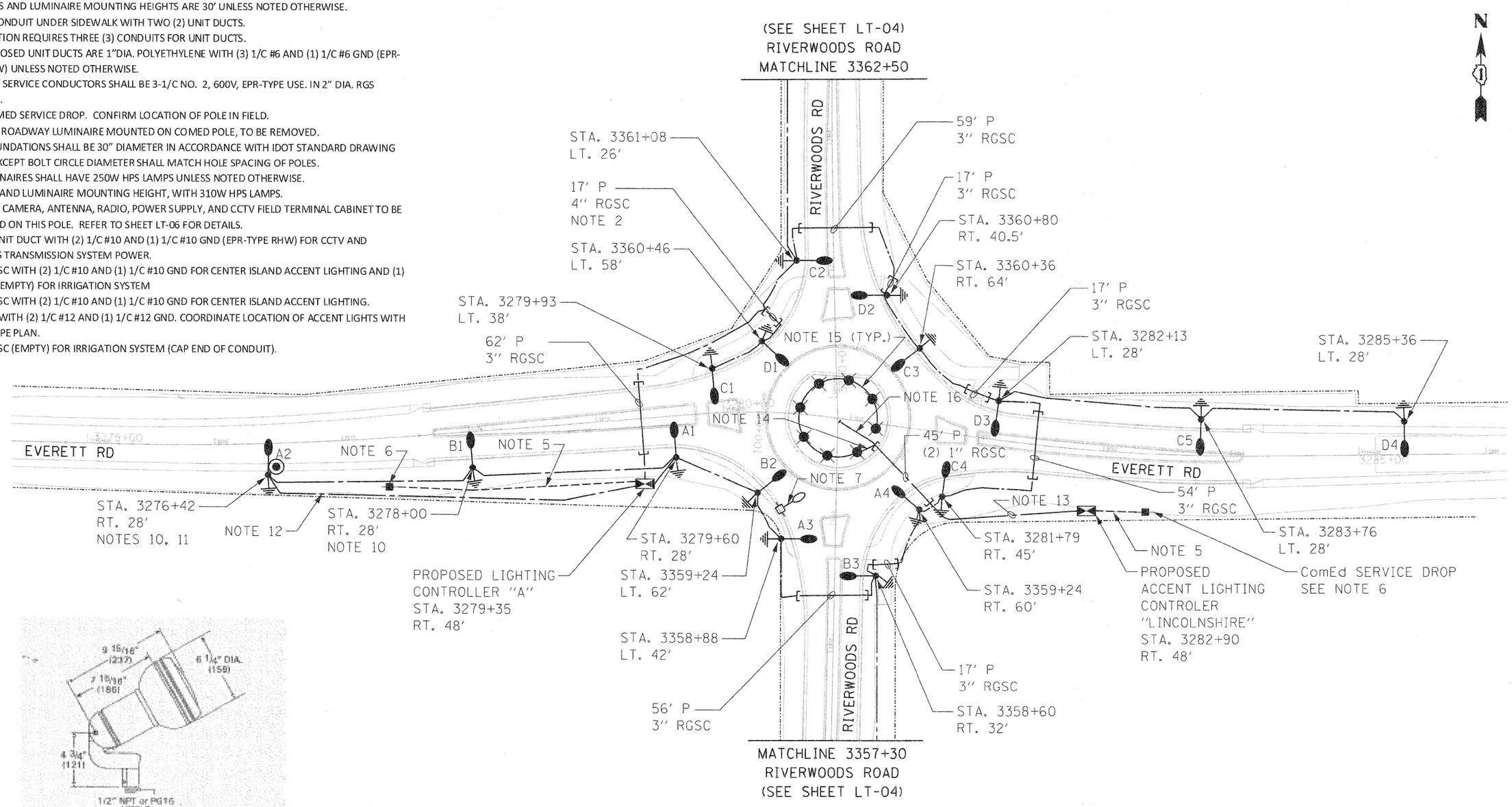
LakeCounty
Division of Transportation

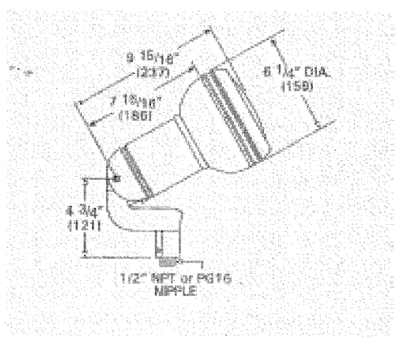
RIVERWOODS AND EVERETT ROADS
SCHEDULE OF QUANTITIES

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	64	107

NOTES

1. ALL POLES AND LUMINAIRE MOUNTING HEIGHTS ARE 30' UNLESS NOTED OTHERWISE.
2. 4" RGS CONDUIT UNDER SIDEWALK WITH TWO (2) UNIT DUCTS.
3. FOUNDATION REQUIRES THREE (3) CONDUITS FOR UNIT DUCTS.
4. ALL PROPOSED UNIT DUCTS ARE 1"DIA. POLYETHYLENE WITH (3) 1/C #6 AND (1) 1/C #6 GND (EPR-TYPE RHW) UNLESS NOTED OTHERWISE.
5. THE NEW SERVICE CONDUCTORS SHALL BE 3-1/C NO. 2, 600V, EPR-TYPE USE. IN 2" DIA. RGS CONDUIT.
6. NEW COMED SERVICE DROP. CONFIRM LOCATION OF POLE IN FIELD.
7. EXISTING ROADWAY LUMINAIRE MOUNTED ON COMED POLE, TO BE REMOVED.
8. POLE FOUNDATIONS SHALL BE 30" DIAMETER IN ACCORDANCE WITH IDOT STANDARD DRAWING BE-301 EXCEPT BOLT CIRCLE DIAMETER SHALL MATCH HOLE SPACING OF POLES.
9. ALL LUMINAIRES SHALL HAVE 250W HPS LAMPS UNLESS NOTED OTHERWISE.
10. 45' POLE AND LUMINAIRE MOUNTING HEIGHT, WITH 310W HPS LAMPS.
11. CCTV PTZ CAMERA, ANTENNA, RADIO, POWER SUPPLY, AND CCTV FIELD TERMINAL CABINET TO BE MOUNTED ON THIS POLE. REFER TO SHEET LT-06 FOR DETAILS.
12. 1" DIA. UNIT DUCT WITH (2) 1/C #10 AND (1) 1/C #10 GND (EPR-TYPE RHW) FOR CCTV AND WIRELESS TRANSMISSION SYSTEM POWER.
13. (1) 1" RGSC WITH (2) 1/C #10 AND (1) 1/C #10 GND FOR CENTER ISLAND ACCENT LIGHTING AND (1) 1" RGSC (EMPTY) FOR IRRIGATION SYSTEM
14. (1) 1" RGSC WITH (2) 1/C #10 AND (1) 1/C #10 GND FOR CENTER ISLAND ACCENT LIGHTING.
15. ½" RGSC WITH (2) 1/C #12 AND (1) 1/C #12 GND. COORDINATE LOCATION OF ACCENT LIGHTS WITH LANDSCAPE PLAN.
16. (1) 1" RGSC (EMPTY) FOR IRRIGATION SYSTEM (CAP END OF CONDUIT).





LED ACCENT LIGHT
HYDREL MODEL 4640 22LED
NOT TO SCALE

SCALE
0 20 40

LT-03
03415

REVISIONS / REMARKS					
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		/ /		CHECKED BY:	IB
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SPAAN Tech, Inc.
313 South Wacker Drive, Suite 2400
Chicago, Il 60606

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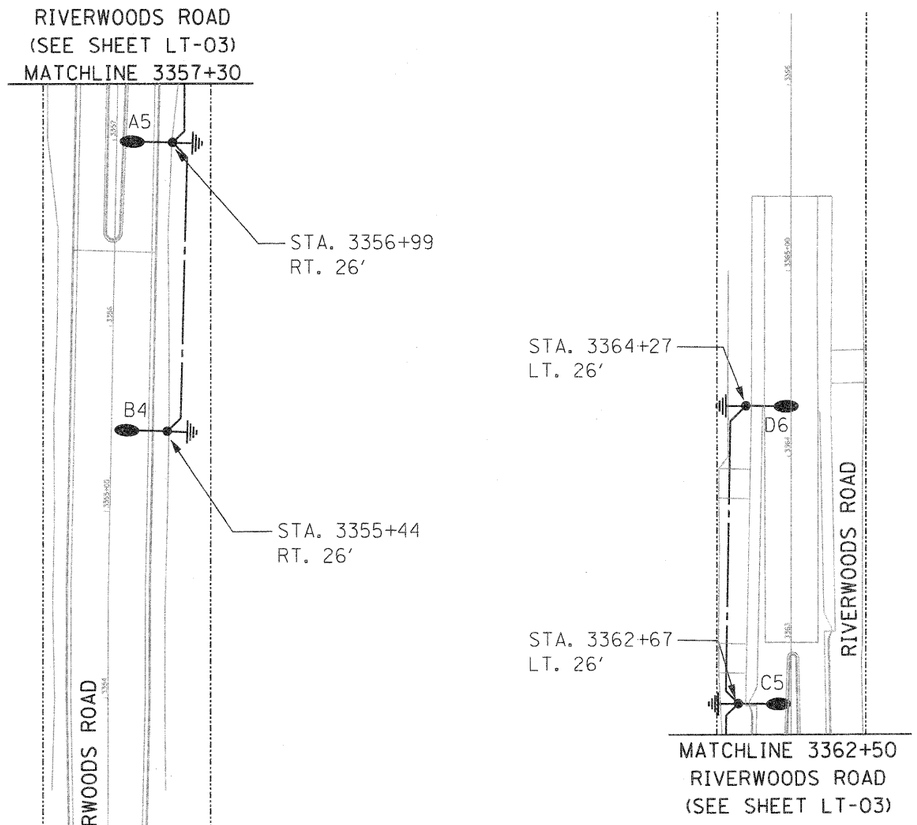
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

RIVERWOODS AND EVERETT ROADS
PROPOSED ROADWAY LIGHTING PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	65	107

FILE NAME:



N

NOTES

1. ALL LUMINAIRE MOUNTING HEIGHTS ARE 30'.
2. ALL PROPOSED UNIT DUCTS ARE 1" DIA. POLYETHYLENE WITH (3) 1/C #4 AND (1) 1/C#6 GND (EPR-TYPE RHW).
3. POLE FOUNDATIONS SHALL BE 30" DIAMETER IN ACCORDANCE WITH IDOT STANDARD DRAWING BE-301 EXCEPT BOLT CIRCLE DIAMETER SHALL MATCH HOLE SPACING OF POLES.
4. ALL LUMINAIRES SHALL HAVE 250W HPS LAMPS.

SCALE
0 20 40

LT-04
63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	DL
		/ /		CHECKED BY:	IB
		/ /		DATE: 01/22/10	

SPAAN Tech, Inc.
311 South Wacker Drive, Suite 2400
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HDR Engineering, Inc.
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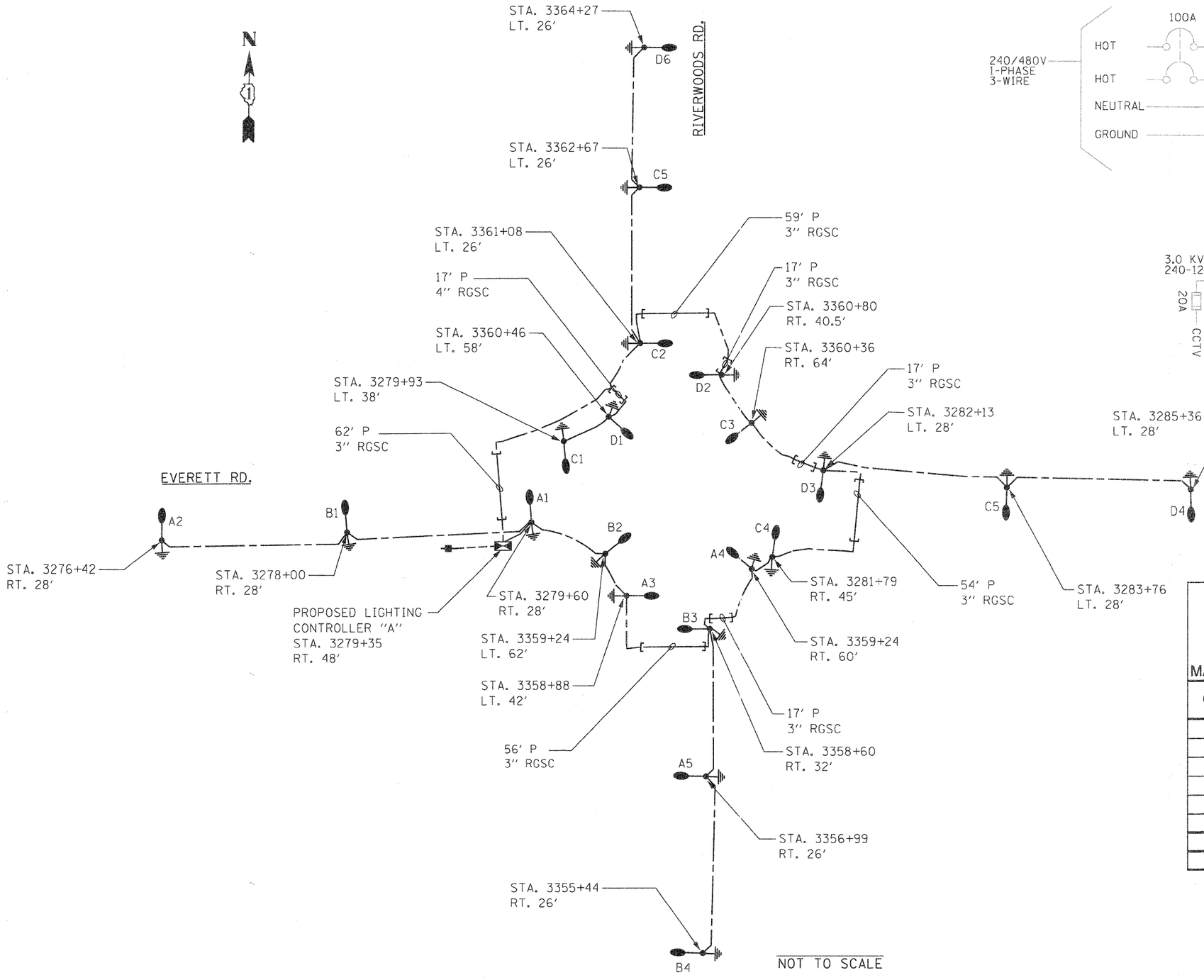
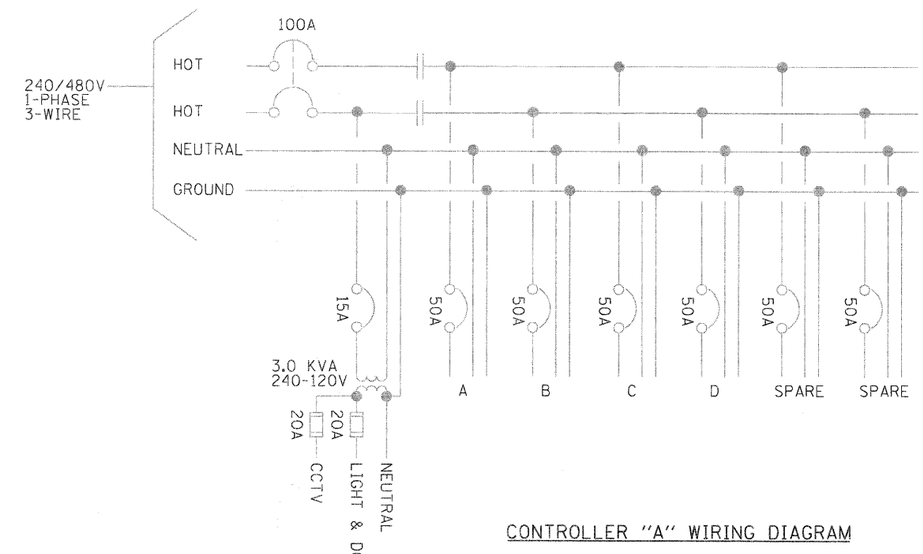
LakeCounty
Division of Transportation

RIVERWOODS AND EVERETT ROADS
PROPOSED ROADWAY LIGHTING PLAN

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	66	107

FILE NAME:





CONTROLLER "A" WIRING DIAGRAM

PANEL SCHEDULE AND LOAD TABULATION
LIGHTING CONTROLLER A
240/480 VAC, 1-PHASE, 3-WIRE

MAIN BREAKER: 100A

CIRCUIT	BREAKER TRIP AMPS	KW BLACK	KW RED	AMPS
A	50	1.6	–	6.5
B	50	–	1.3	5.2
C	50	1.9	–	7.8
D	50	–	1.6	6.5
SPARE	50			
SPARE	50			
	SUBTOTAL	3.5	2.9	–
	TOTAL	6.4		13.0

LT-05
63415

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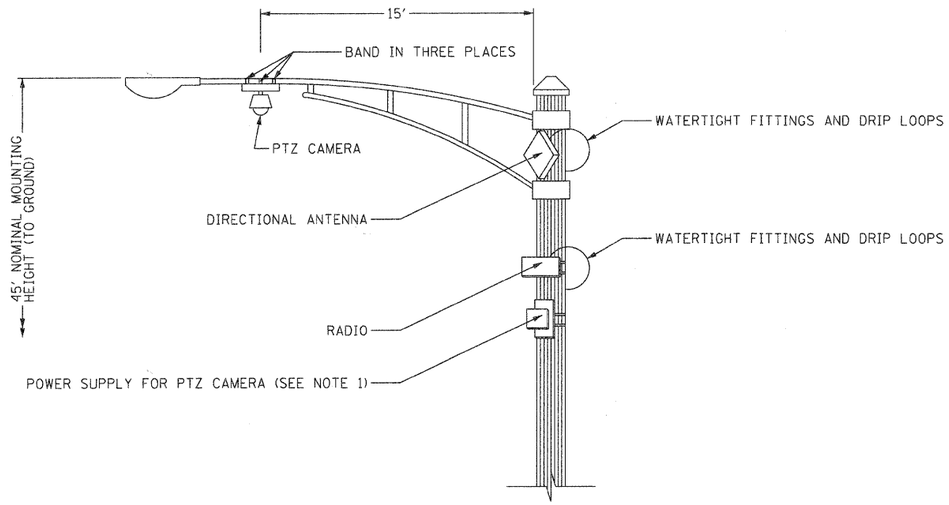
RIVERWOODS AND EVERETT RDS.
WIRING DIAGRAM

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	67	107

FILE NAME:

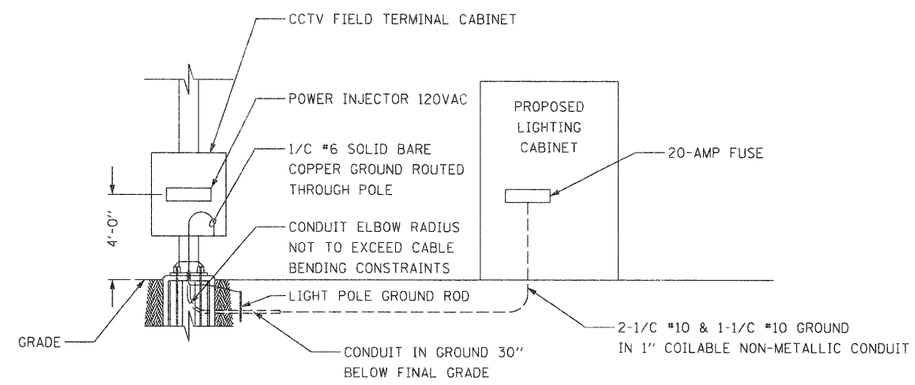


WIRELESS ANTENNA, RADIO, AND DOME (PTZ) CAMERA MOUNTING DETAIL

(NOT TO SCALE)

MANUFACTURER AND PART NOS.:

WIRELESS ANTENNA: HUBER & SUHNER SPA5600/9/23/0/V OR APPROVED EQUAL
RADIO: CISCO AIR-LAP1522AG-A-K9 OR APPROVED EQUAL
POWER INJECTOR: CISCO AIR-PWRINJ1500-2 OR APPROVED EQUAL



CAMERA, WIRELESS ANTENNA, AND RADIO INSTALLATION ON CAMERA MOUNTING ASSEMBLY DETAIL

(NOT TO SCALE)

NOTES:

1. PELCO MODEL WC51-4, 24VAC POWER SUPPLY. THE COST OF THE POWER SUPPLY WILL BE INCIDENTAL TO THE PAY ITEM FOR "REMOTE-CONTROLLED VIDEO SYSTEM"

LT-06
63415

REVISIONS / REMARKS					
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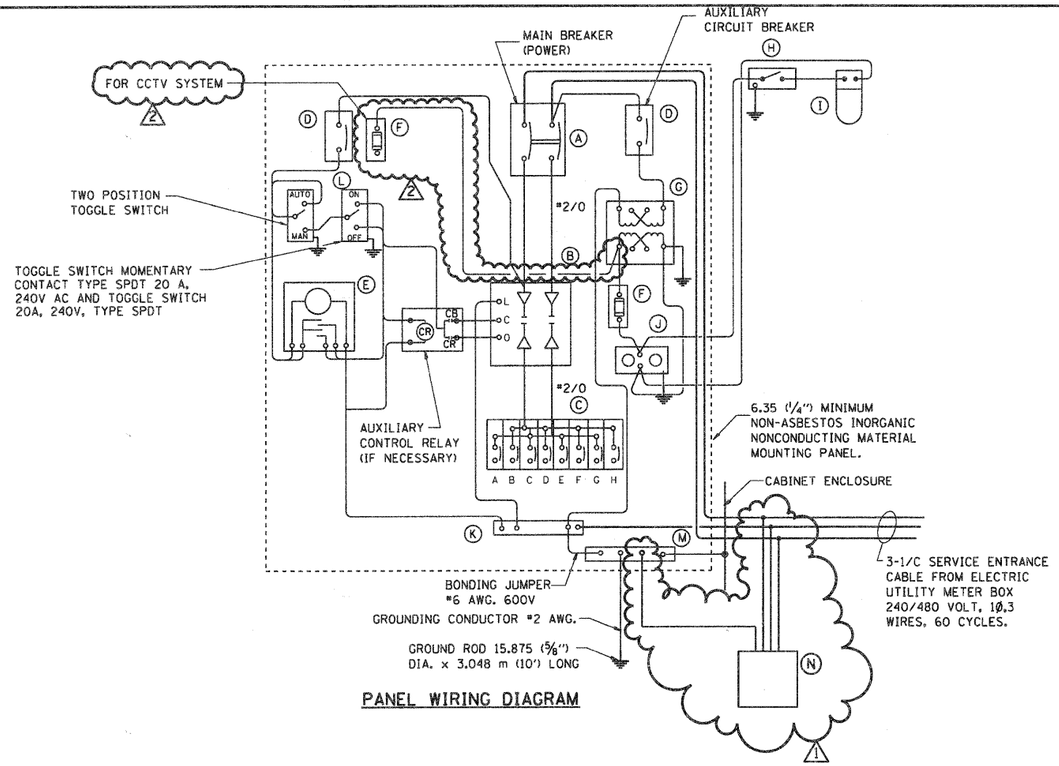
LakeCounty Division of Transportation

RIVERWOODS AND EVERETT ROADS
PTZ CAMERA & WIRELESS TRANSMISSION DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	68	107

FILE NAME:

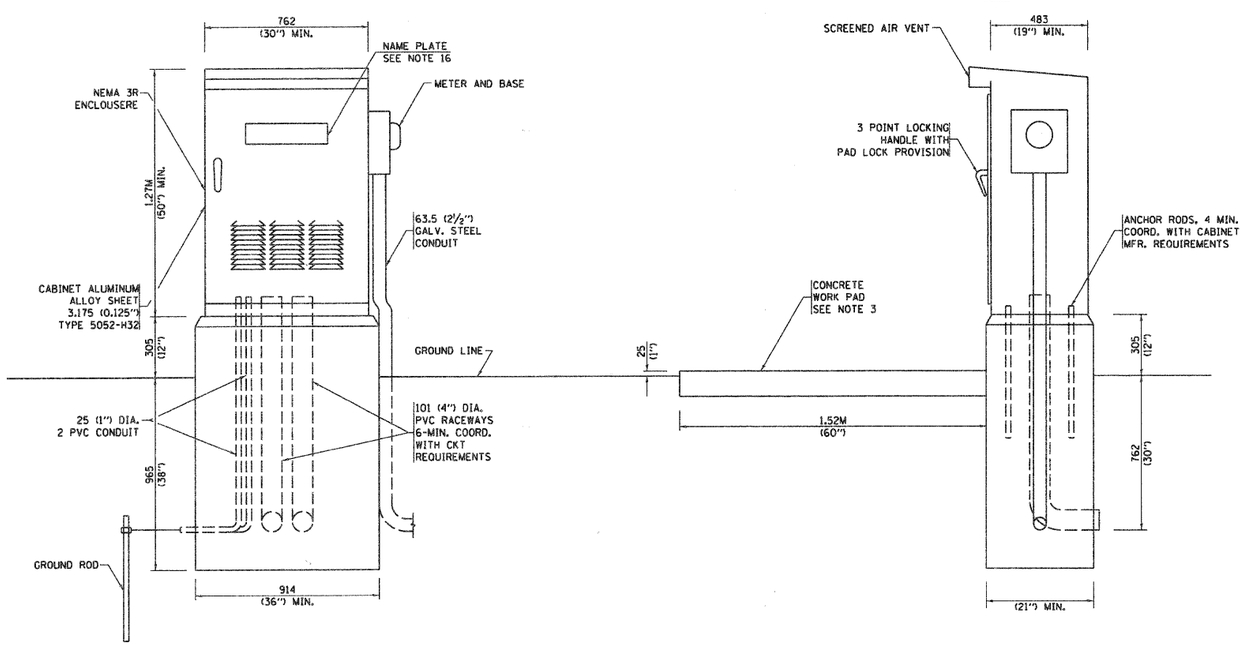


PANEL WIRING DIAGRAM

PANEL EQUIPMENT

BILL OF MATERIAL

ITEM	QUANTITY	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 125AMP. FRAME, 100AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 480 VOLT.
B	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 200 AMP., 600 VOLTS CONTROL CIRCUIT 240 VOLT.
C	8	CIRCUIT BREAKERS, 1 POLE, 100AMP. FRAME, 50 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240 V.
D	2	CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 240 V., 100AMP. FRAME, 15AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-5000 AMP. AT 240 V.
E	1	ASTRONOMIC MICROPROCESSOR-BASED 2-CHANNEL CONTROLLER [TIME SWITCH].
F	2	20 A., 120 V. FUSE.
G	1	3.0 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480 / 120 X 240 VOLT, 60 Hz.
H	1	SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN.
I	1	INCANDESCENT LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT, 120 V. LAMP.
J	1	20 A., 120 V., DUPLEX RECEPTACLE, GFCI.
K	1	COPPER GROUND BUS 6.35 (1/4") X 25.4 (1") X 304.8 mm (12") LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS
L	1	TOGGLE SWITCHES MOUNTED IN 101.6 (4") X 101.6 mm (4") BOX.
M	1	COPPER GROUND BUS 6.35 (1/4") X 25.4 (1") X 304.8 mm (12") LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS
N	1	BRACKET MOUNTED SURGE ARRESTER FOR 480/240V, 3W, SERVICE GE "TRANQUEL" CAT# 9L15ECB001



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
3. IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 50.8 mm (2") TOP SOIL. LEVEL THE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD 914.4 mm (36") x 18.288 m (60") x 101 mm (4") 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 6.35 mm (1/4") 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"
16. 304.8 (12") X 406.4 mm (16") STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED

MODIFIED BE-215

1 MODIFIED 09/16/09
2 MODIFIED 12/28/09

LT-07
63415

REVISIONS / REMARKS					
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		/ /		DATE: 01/22/10	

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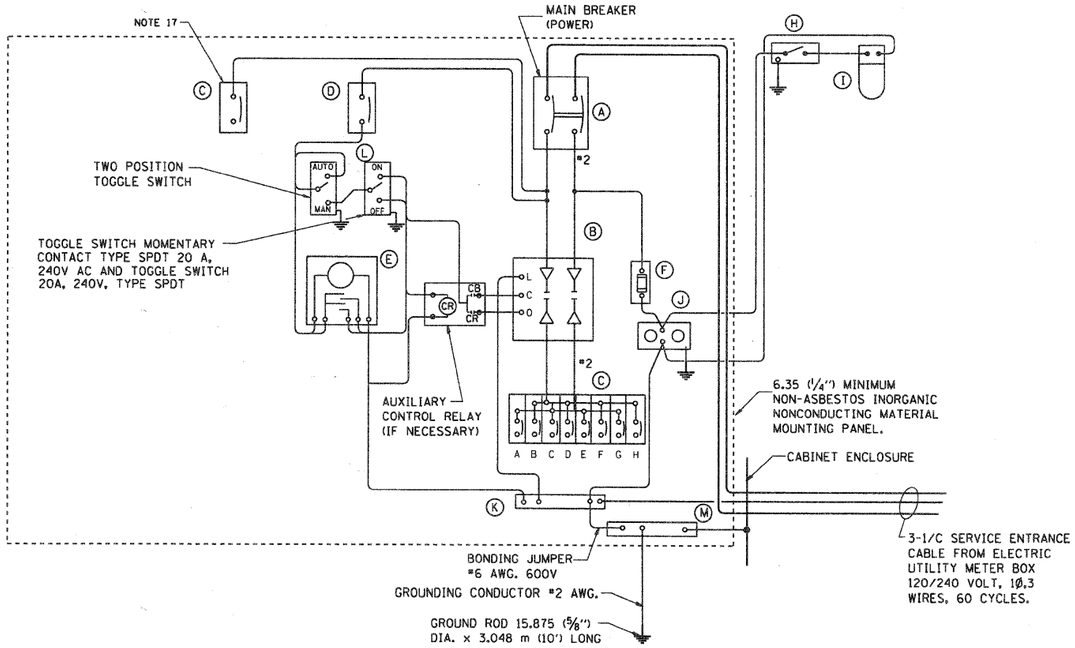
LakeCounty
Division of Transportation

RIVERWOODS AND EVERETT RDS.
LIGHTING CONTROLLER SINGLE DOOR

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	69	107

FILE NAME:

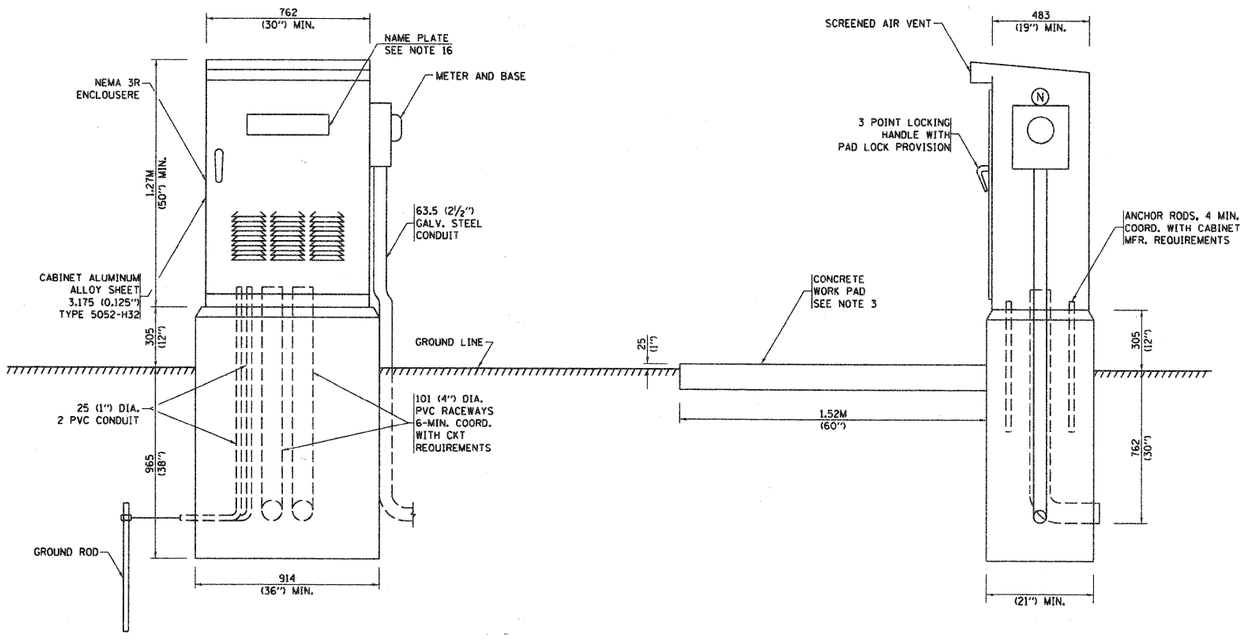


PANEL WIRING DIAGRAM

PANEL EQUIPMENT

BILL OF MATERIAL

ITEM	QUANTITY	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2 POLE, 240 VOLT 100 AMP. FRAME, 100AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10000 AMP. AT 240 VOLT.
B	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 100AMP., 600 VOLTS, CONTROL CIRCUIT 120 VOLT.
C	9	CIRCUIT BREAKERS, 1 POLE, 100AMP. FRAME, 20 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240 V.
D	1	CONTROL CIRCUIT-CIRCUIT BREAKER. 1 POLE, 240 V., 100AMP. FRAME, 15AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10000 AMP. AT 240 V.
E	1	ASTRONOMIC MICROPROCESSOR-BASED 2-CHANNEL CONTROLLER [TIME SWITCH].
F	1	20 A., 120 V. FUSE.
G	1	NOT USED
H	1	SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN.
I	1	INCANDESCENT LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT, 120 V. LAMP.
J	1	20 A., 120 V., DUPLEX RECEPTACLE, GFCI.
K	1	COPPER GROUND BUS 6.35 (1/4") X 25.4 (1") X 304.8 mm (12") LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS
L	1	TOGGLE SWITCHES MOUNTED IN 101.6 (4") X 101.6 mm (4") BOX.
M	1	COPPER GROUND BUS 6.35 (1/4") X 25.4 (1") X 304.8 mm (12") LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS
N	1	METER SOCKET, 240V, 100AMP, 1-PHASE, 3-WIRE, ComEd APPROVED.



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
3. IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 50.8 mm (2") TOP SOIL, LEVEL THE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD 914.4 mm (36") x 18.288 m (60") x 101 mm (4") 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 6.35 mm (1/4") 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"
16. 304.8 (12") X 406.4 mm (16") STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "VILLAGE OF LINCOLNSHIRE LIGHTING CONTROLS".
17. PROVIDE NAMEPLATE ENGRAVED "IRRIGATION SYSTEM".

LT-07A

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	DL
		/ /		CHECKED BY:	IB
		/ /		DATE: 01/22/10	

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LakeCounty Division of Transportation

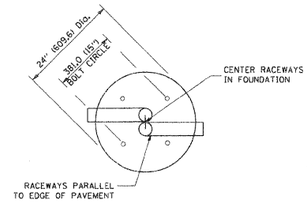
RIVERWOODS AND EVERETT ROADS
ACCENT LIGHTING CONTROLLER (LINCOLNSHIRE)

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	70	107

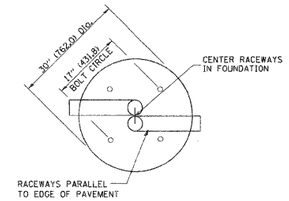
FILE NAME:

LIGHT POLE FOUNDATION DEPTH TABLE
40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

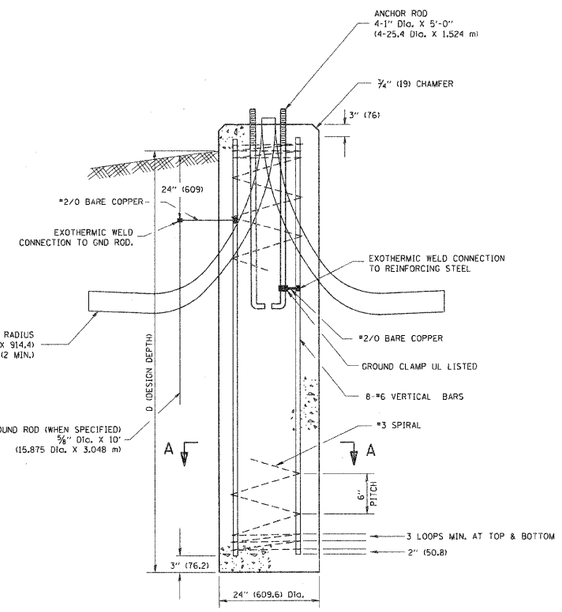
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY Qu = 0.75 TON/SQ.FT	9'-6" (2.09 m)	10'-9" (3.23 m)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND Ø = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND Ø = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND Ø = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)



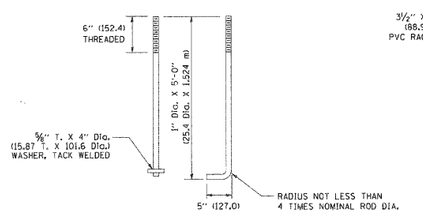
TOP VIEW



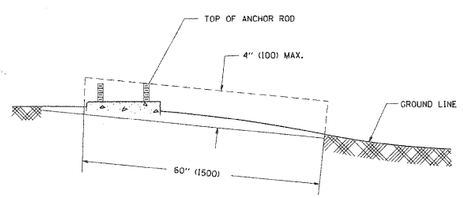
TOP VIEW



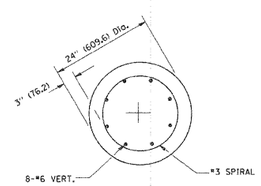
FOUNDATION DETAIL



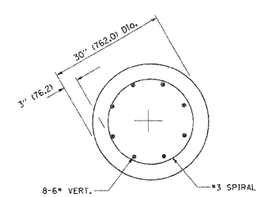
ANCHOR ROD DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A



SECTION A-A

NOTES

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED. IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
5. THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
6. THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
8. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
9. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
11. ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
12. THE CONTRACTOR SHALL USE A *3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE *3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
14. THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

FILE NAME = W:\distsfd\22x34\be301.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - 04-22-02	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN -	REVISED -	
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -	
	PLOT DATE = 1/4/2008	DATE -	REVISED -	

LIGHT POLE FOUNDATION
40' (12.192 m) TO 47 1/2' (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-301	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

LT-09
63415

REVISIONS / REMARKS					
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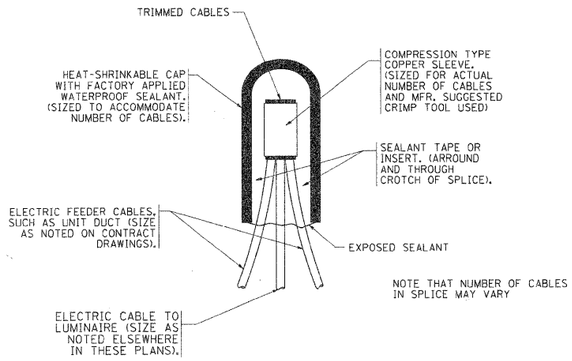
LakeCounty
Division of Transportation

RIVERWOODS AND EVERETT ROADS
IDOT DISTRICT 1 DETAIL BE-301

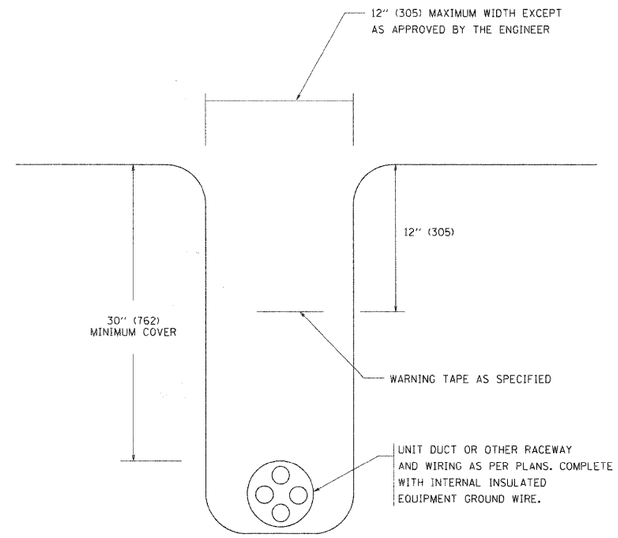
ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	71	107

FILE NAME:



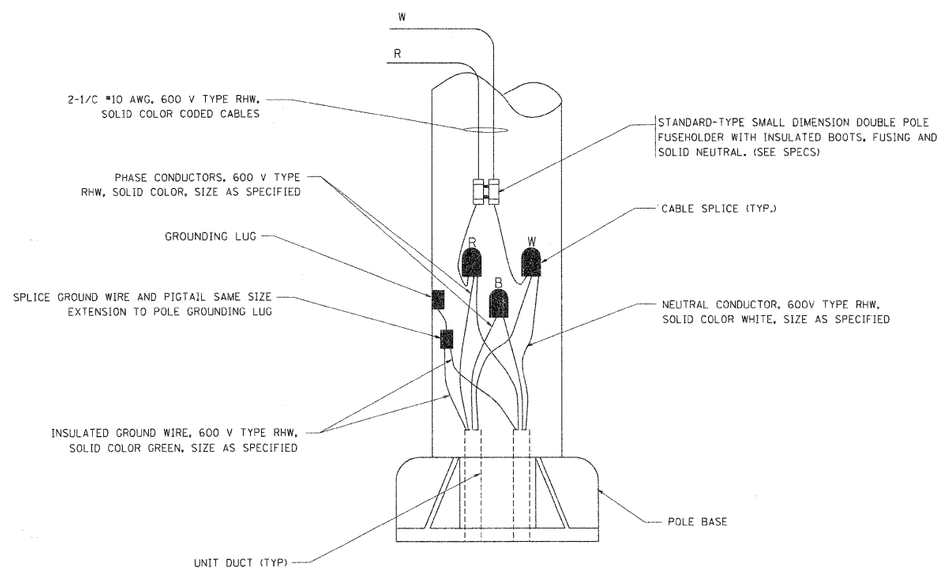
TYPICAL SPLICE DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

N.T.S.



POLE WIRING DETAIL

N.T.S.

FILE NAME = W:\diststd\22x34\be702.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - 08-08-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MISC. ELECTRICAL DETAILS SHEET A	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -				BE-702	CONTRACT NO.		
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -			FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.					

LT-10

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	DL
		/ /		CHECKED BY:	IB
		/ /		DATE: 01/22/10	

SPAAN Tech, Inc. 311 South Wacker Drive, Suite 2400 Chicago, Il 60606 phone: 312.277.8400 fax: 312.277.8408 web: www.SpaanTech.com

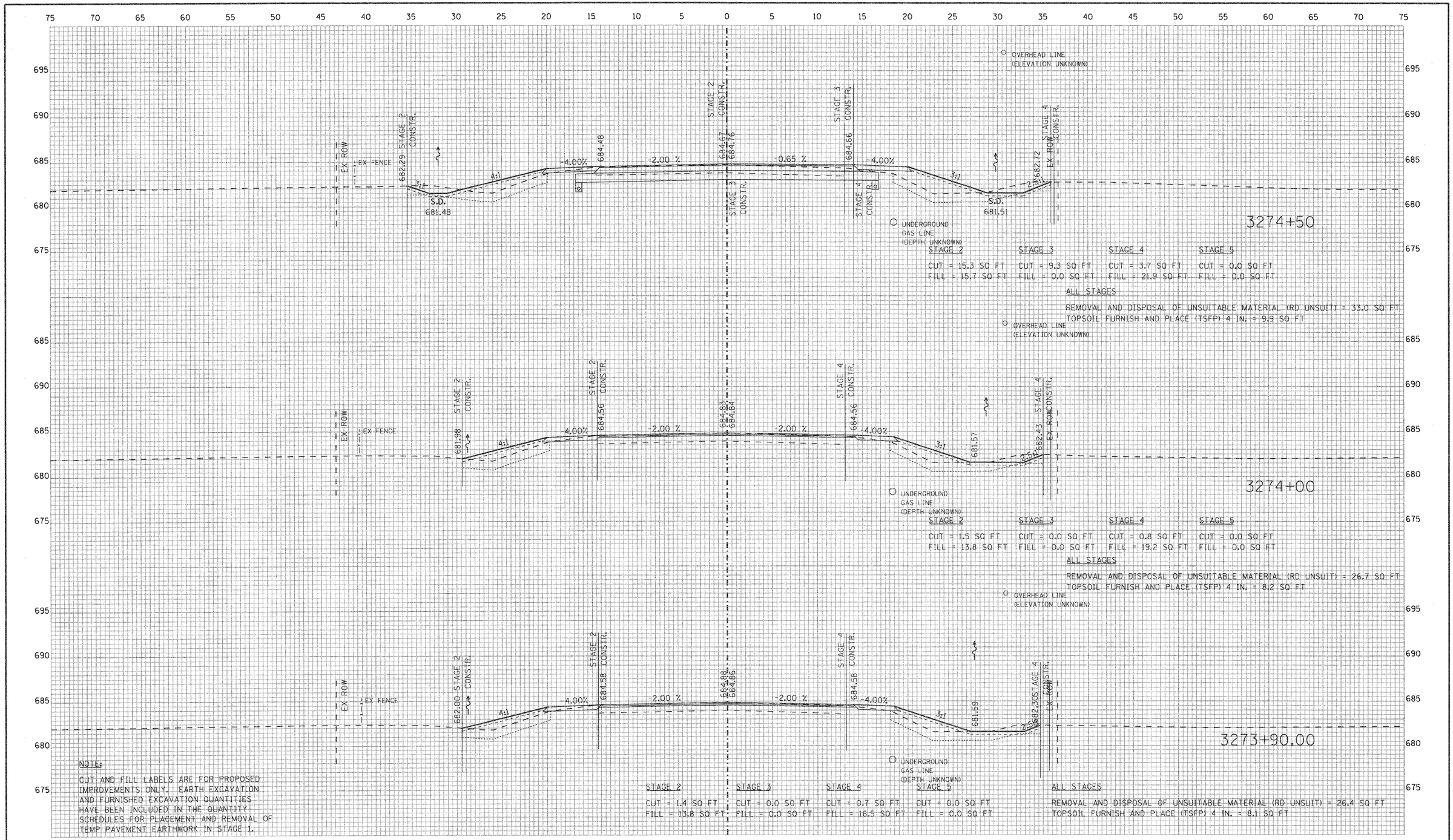
HDR Engineering, Inc. 30 N LaSalle Street, Suite 3220 Chicago, IL 60602 312-443-4900

LakeCounty Division of Transportation

RIVERWOODS AND EVERETT ROADS
IDOT DISTRICT 1 DETAIL BE-702

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	72	107

FILE NAME:



NOTE:

CUT AND FILL LABELS ARE FOR PROPOSED IMPROVEMENTS ONLY. EARTH EXCAVATION AND FURNISHED EXCAVATION QUANTITIES HAVE BEEN INCLUDED IN THE QUANTITY SCHEDULES FOR PLACEMENT AND REMOVAL OF TEMP PAVEMENT EARTHWORK IN STAGE 1.

LEGEND: - - - - - - - - - EXIST. GROUND ..... BOTTOM OF TOPSOIL STRIPPING

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES HORIZ. & VERT. 0 5 10

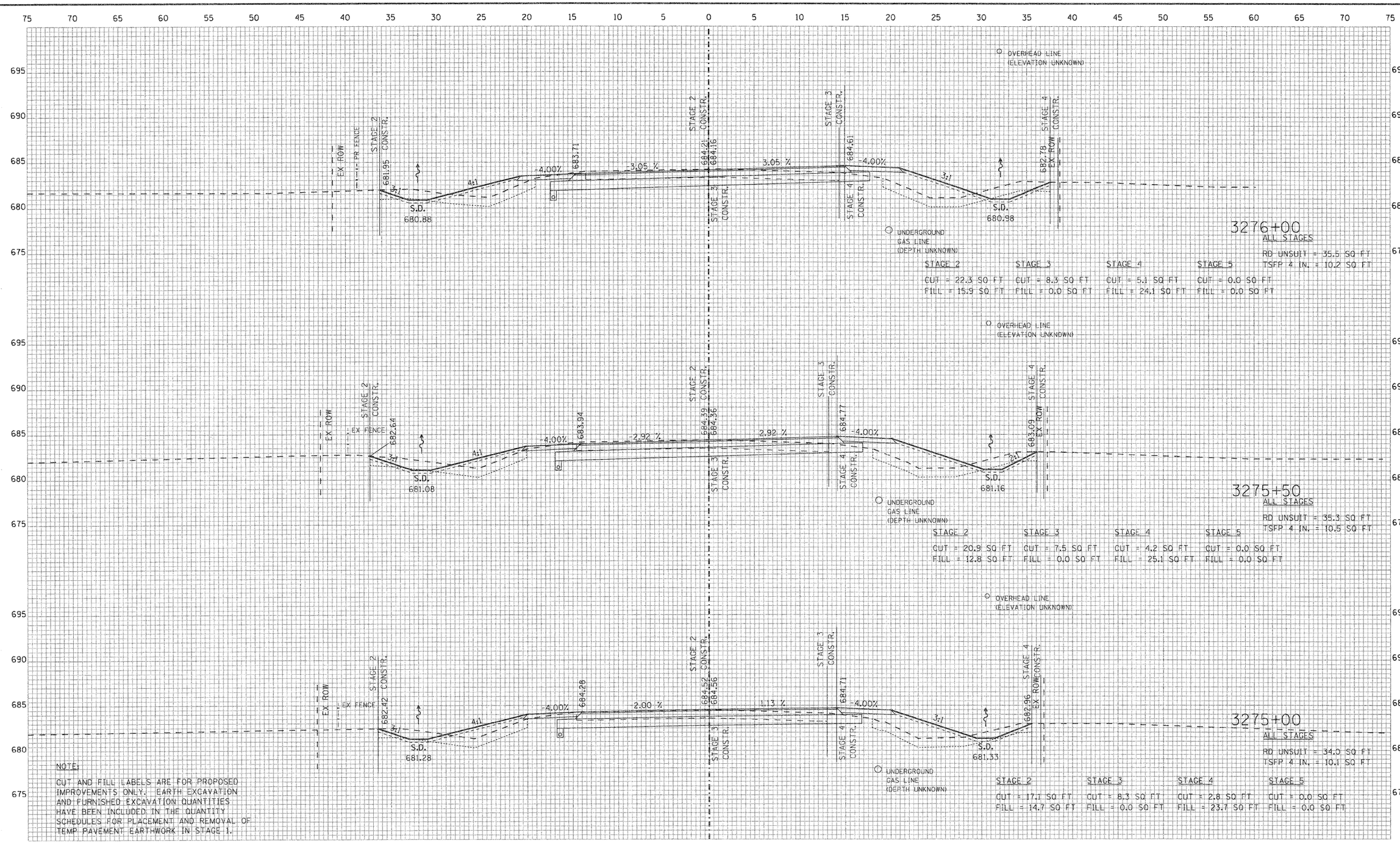
HDR Engineering, Inc. — 32 N LaSalle Street, Suite 3220, Chicago, IL 60602, 312-443-4900

LakeCounty Division of Transportation

EVERETT ROAD — CROSS SECTION STA. 3273+82.86 TO STA. 3274+50

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	73	107

FILE NAME: $FILE$



NOTE:

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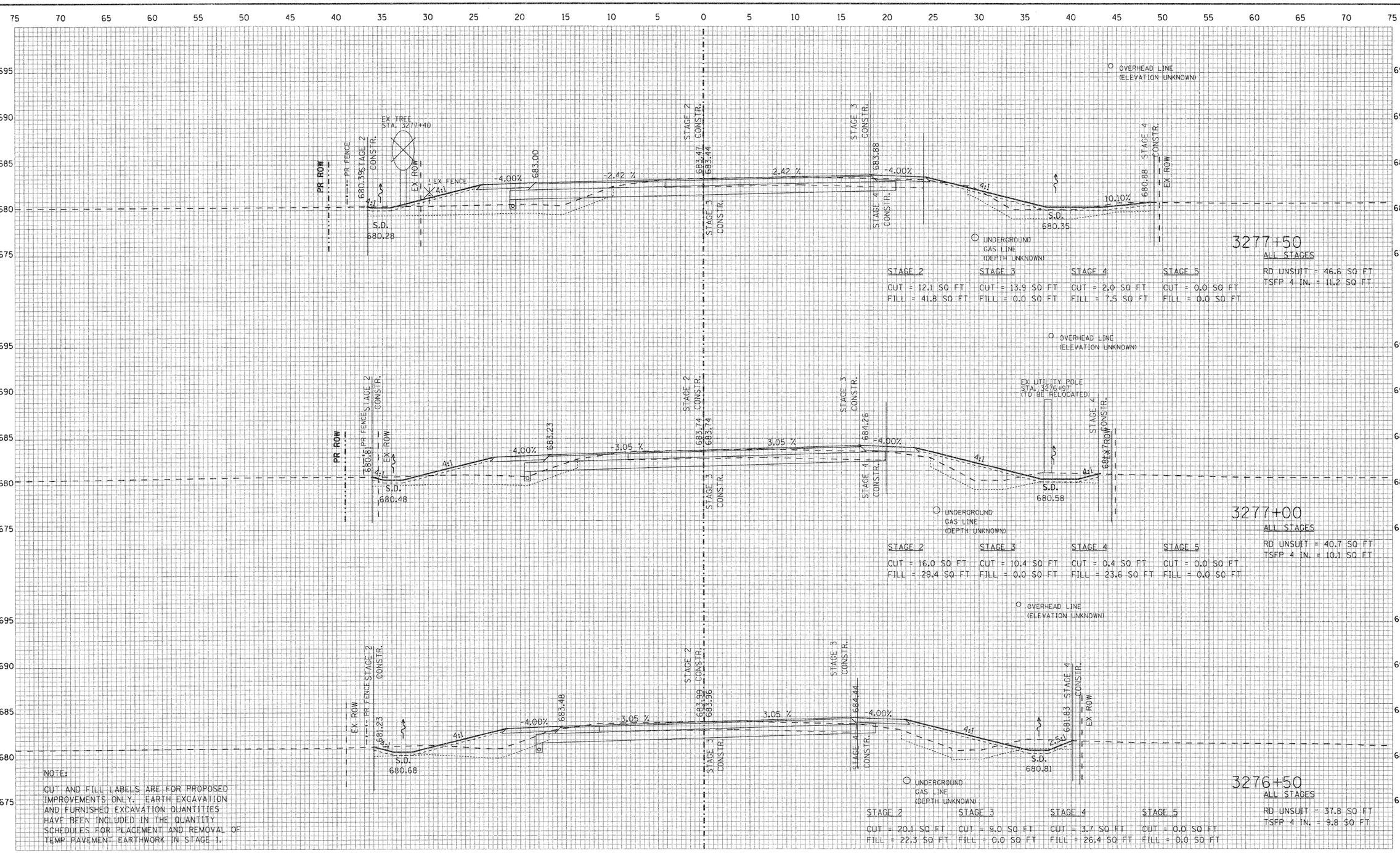
LEGEND: - - - - - - - - - - EXIST. GROUND ..... BOTTOM OF TOPSOIL STRIPPING

63415

REVISIONS / REMARKS						SCALES HORIZ. & VERT.	HDR Engineering, Inc.	LakeCounty Division of Transportation	EVERETT ROAD	ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM		30 N LaSalle Street, Suite 3220 Chicago, IL 60602 312-443-4900		CROSS SECTION STA. 3275+00 TO STA. 3276+00	CH	136	04-00136-06-CH	74	107
		/ /		CHECKED BY:	MPK/JLC									
		/ /		DATE:	1/22/2010									

FILE NAME: $FILE$



NOTE:

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63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES
HORIZ. & VERT.
0 5 10

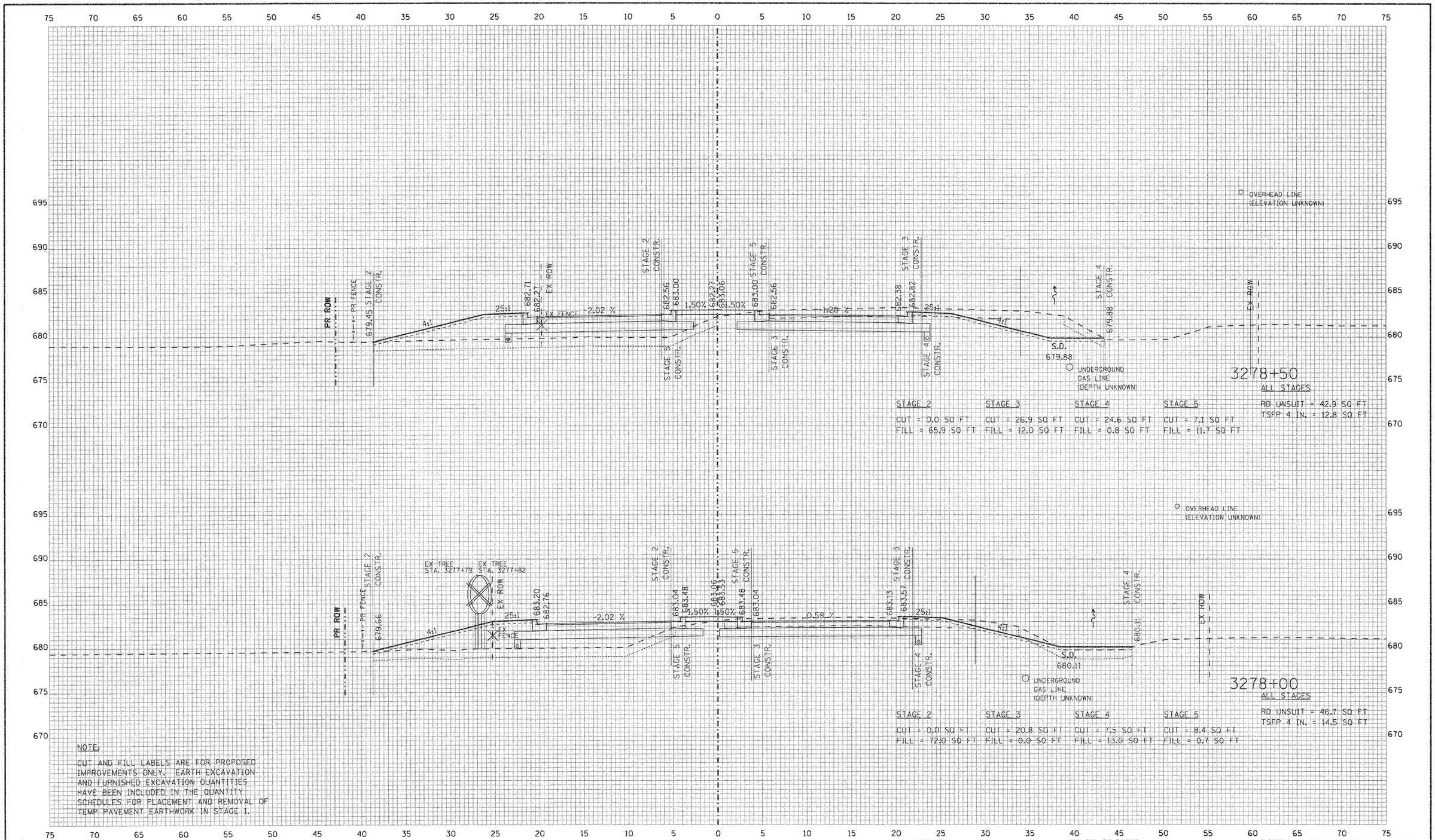
HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

EVERETT ROAD
CROSS SECTION STA. 3276+50 TO STA. 3277+50

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	75	107

FILE NAME: $FILE$



NOTE:

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63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES
HORIZ. & VERT.
0 5 10

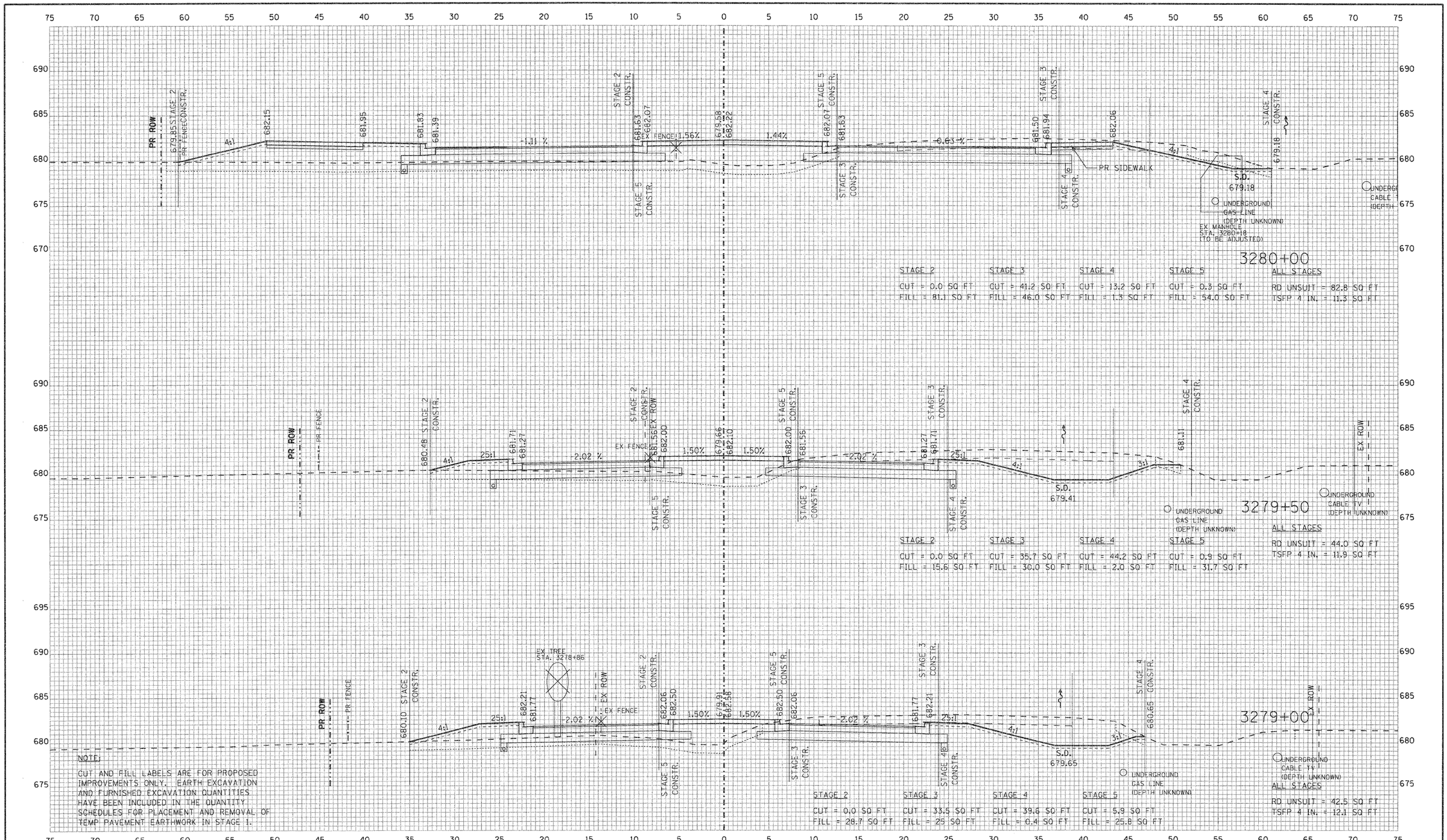
HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

EVERETT ROAD
CROSS SECTION STA. 3278+00 TO STA. 3278+50

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	76	107

FILE NAME: $FILE$



NOTE:
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REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES HORIZ. & VERT. 0 5 10

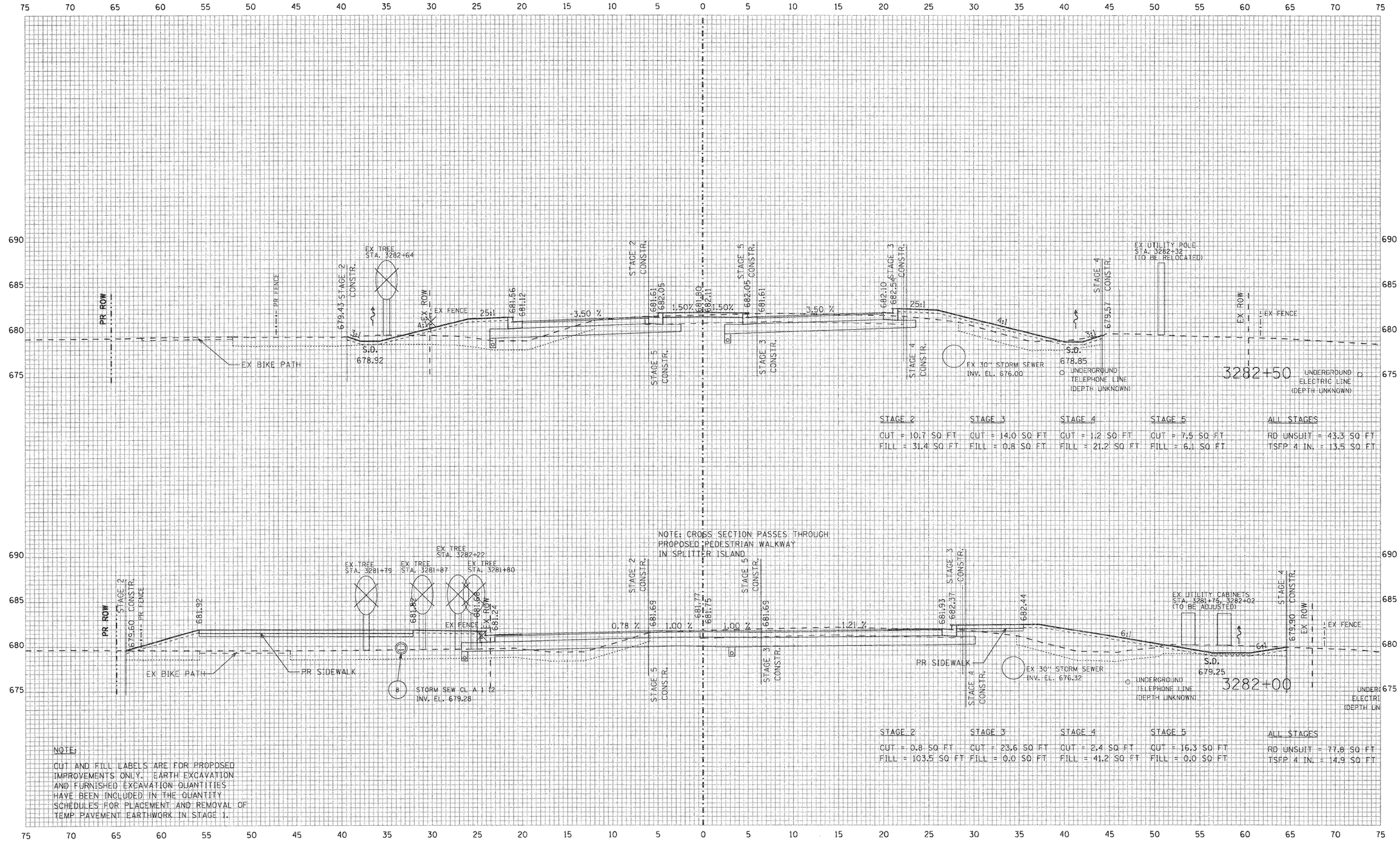
HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4980

LakeCounty Division of Transportation

EVERETT ROAD
CROSS SECTION STA. 3279+00 TO STA. 3280+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	77	107

FILE NAME: $FILE$



	STAGE 2	STAGE 3	STAGE 4	STAGE 5	ALL STAGES
CUT	10.7 SQ FT	14.0 SQ FT	1.2 SQ FT	7.5 SQ FT	RD UNSUIT = 43.3 SQ FT
FILL	31.4 SQ FT	0.8 SQ FT	21.2 SQ FT	6.1 SQ FT	TSFP 4 IN. = 13.5 SQ FT

	STAGE 2	STAGE 3	STAGE 4	STAGE 5	ALL STAGES
CUT	0.8 SQ FT	23.6 SQ FT	2.4 SQ FT	16.3 SQ FT	RD UNSUIT = 77.8 SQ FT
FILL	103.5 SQ FT	0.0 SQ FT	41.2 SQ FT	0.0 SQ FT	TSFP 4 IN. = 14.9 SQ FT

NOTE:

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LEGEND: - - - - - - - - - - EXIST. GROUND ..... BOTTOM OF TOPSOIL STRIPPING

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES
HORIZ. & VERT.
0 5 10

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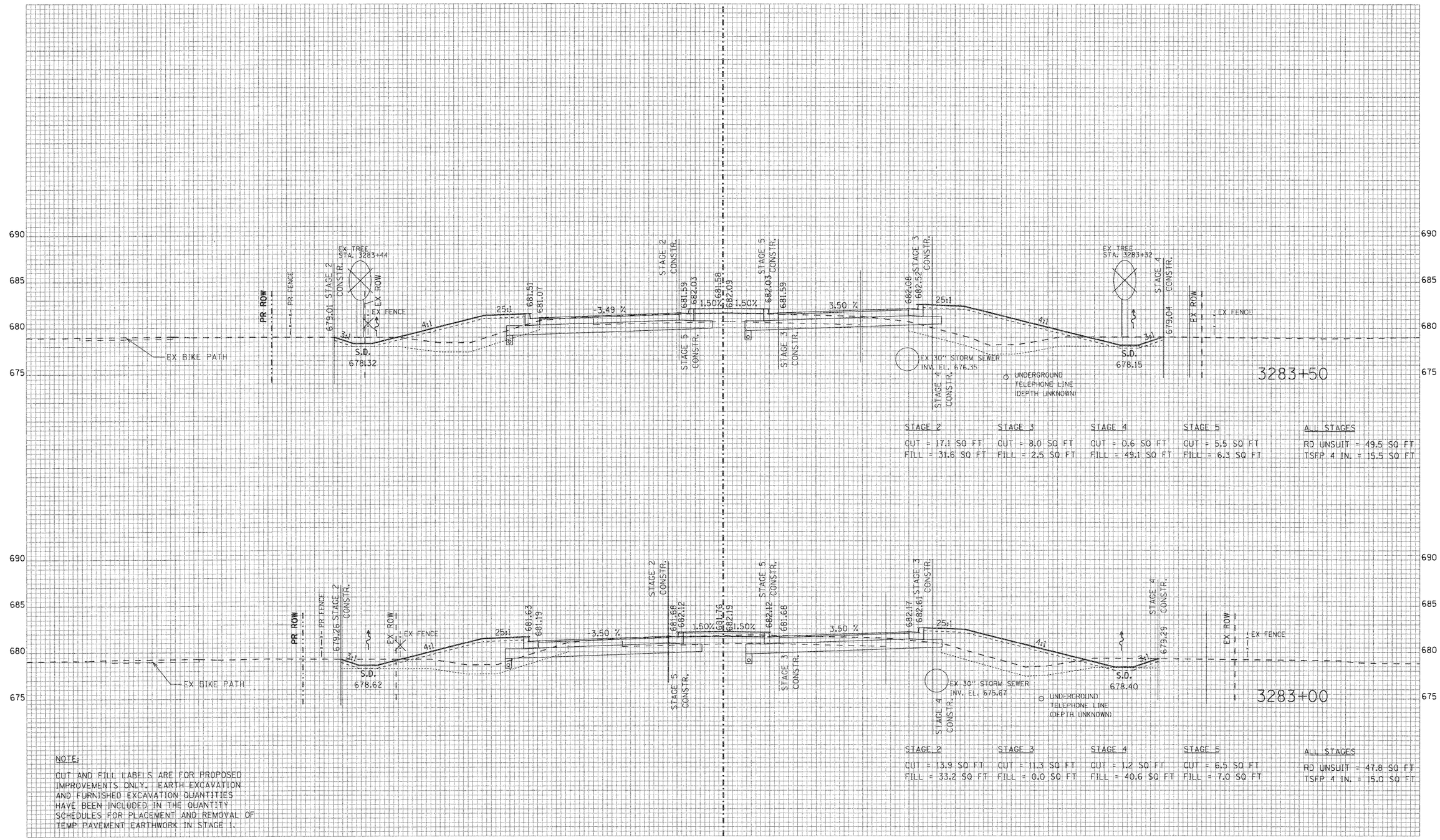
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

EVERETT ROAD
CROSS SECTION STA. 3282+00 TO STA. 3282+50

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	78	107

FILE NAME: $FILE$



STAGE 2	STAGE 3	STAGE 4	STAGE 5	ALL STAGES
CUT = 17.1 SQ FT	CUT = 8.0 SQ FT	CUT = 0.6 SQ FT	CUT = 5.5 SQ FT	RD UNSUIT = 49.5 SQ FT
FILL = 31.6 SQ FT	FILL = 2.5 SQ FT	FILL = 49.1 SQ FT	FILL = 6.3 SQ FT	TSFP 4 IN. = 15.5 SQ FT

STAGE 2	STAGE 3	STAGE 4	STAGE 5	ALL STAGES
CUT = 13.9 SQ FT	CUT = 11.3 SQ FT	CUT = 1.2 SQ FT	CUT = 6.5 SQ FT	RD UNSUIT = 47.8 SQ FT
FILL = 33.2 SQ FT	FILL = 0.0 SQ FT	FILL = 40.6 SQ FT	FILL = 7.0 SQ FT	TSFP 4 IN. = 15.0 SQ FT

NOTE:

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LEGEND: - - - - - - - - - - EXIST. GROUND ..... BOTTOM OF TOPSOIL STRIPPING

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES
HORIZ. & VERT.
0 5 10

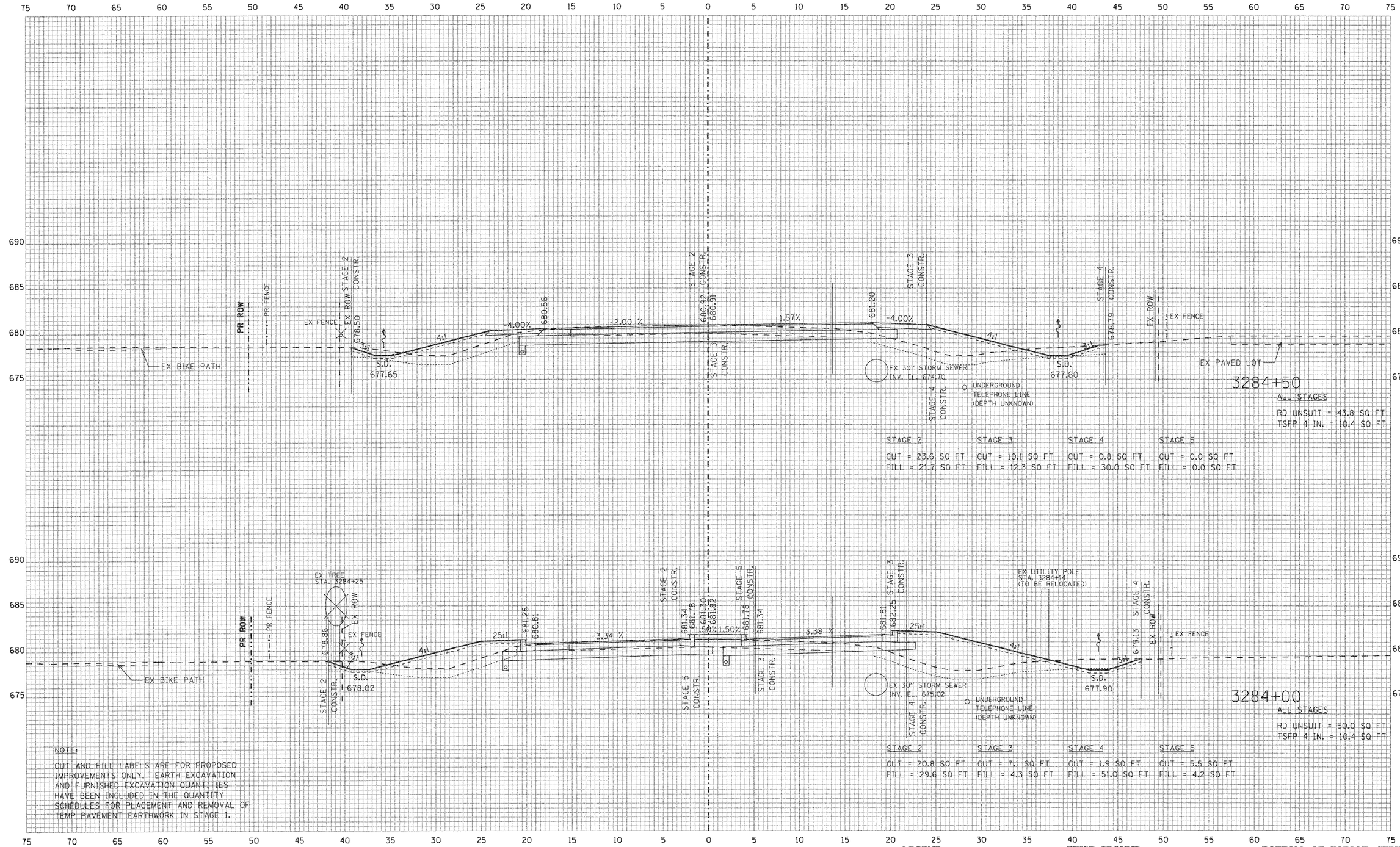
HDR
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4920
HDR Engineering, Inc.

LakeCounty
Division of Transportation

EVERETT ROAD
CROSS SECTION STA. 3283+00 TO STA. 3283+50

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	79	107

FILE NAME: $FILE$



NOTE:

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LEGEND: - - - - - - - - - - EXIST. GROUND ..... BOTTOM OF TOPSOIL STRIPPING

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES
HORIZ. & VERT.
0 5 10

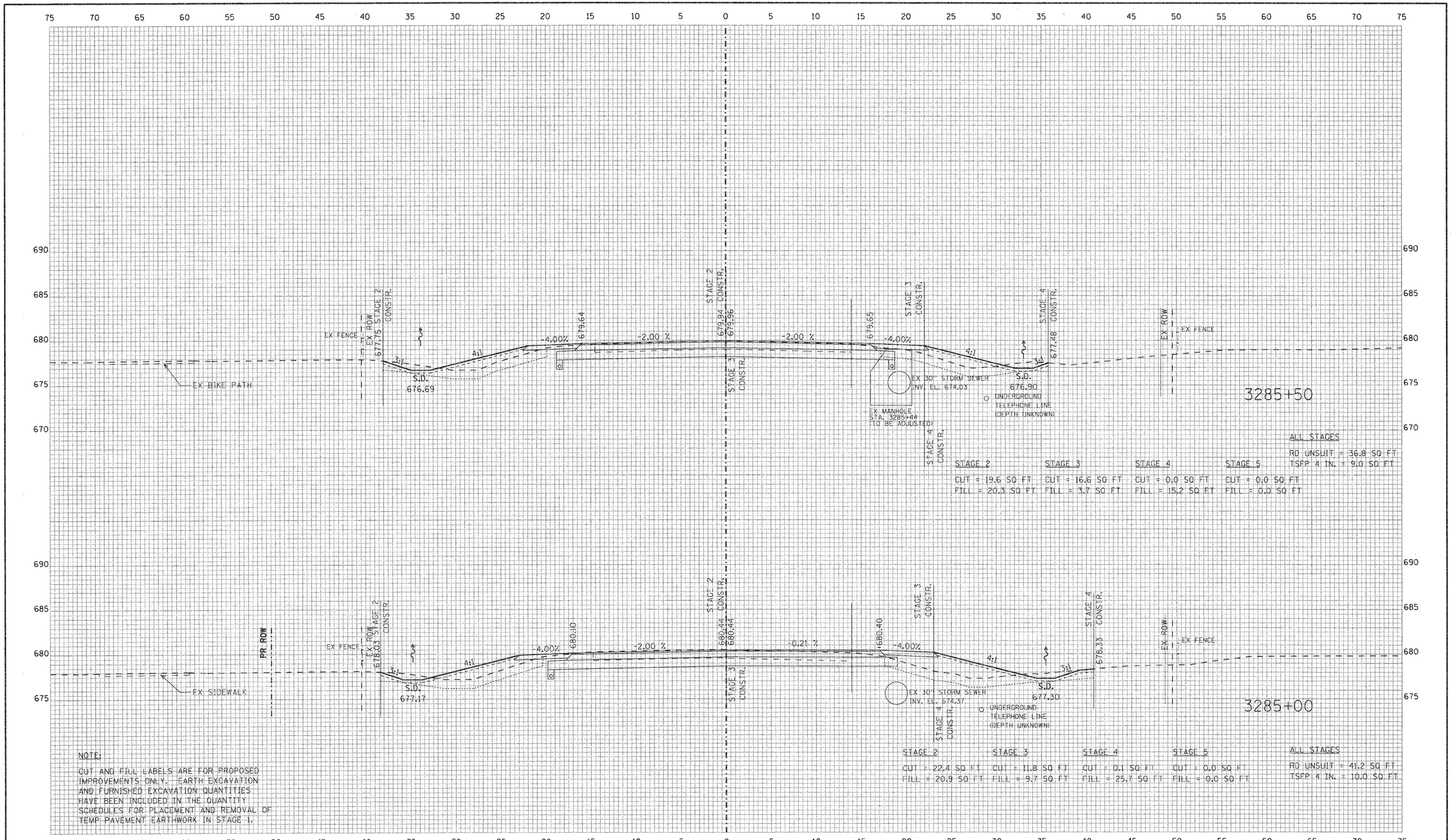
HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

EVERETT ROAD
CROSS SECTION STA. 3284+00 TO STA. 3284+50

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	80	107

FILE NAME: $FILE$



NOTE:

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63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES
HORIZ. & VERT.
0 5 10

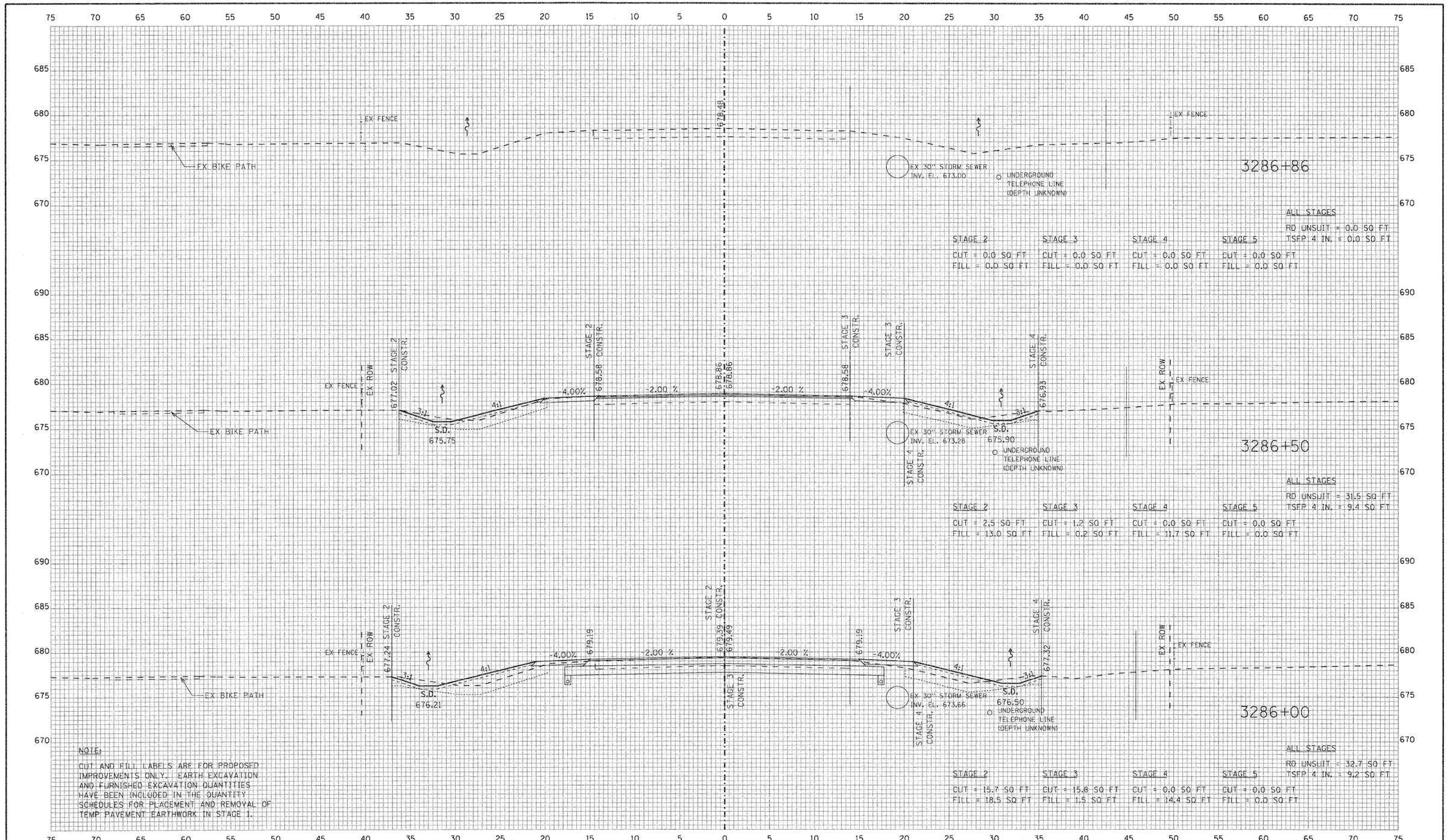
HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

EVERETT ROAD
CROSS SECTION STA. 3285+00 TO STA. 3285+50

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	81	107

FILE NAME: $FILE$



NOTE:

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LEGEND: - - - - - - - - - - EXIST. GROUND ..... BOTTOM OF TOPSOIL STRIPPING

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES
HORIZ. & VERT.
0 5 10

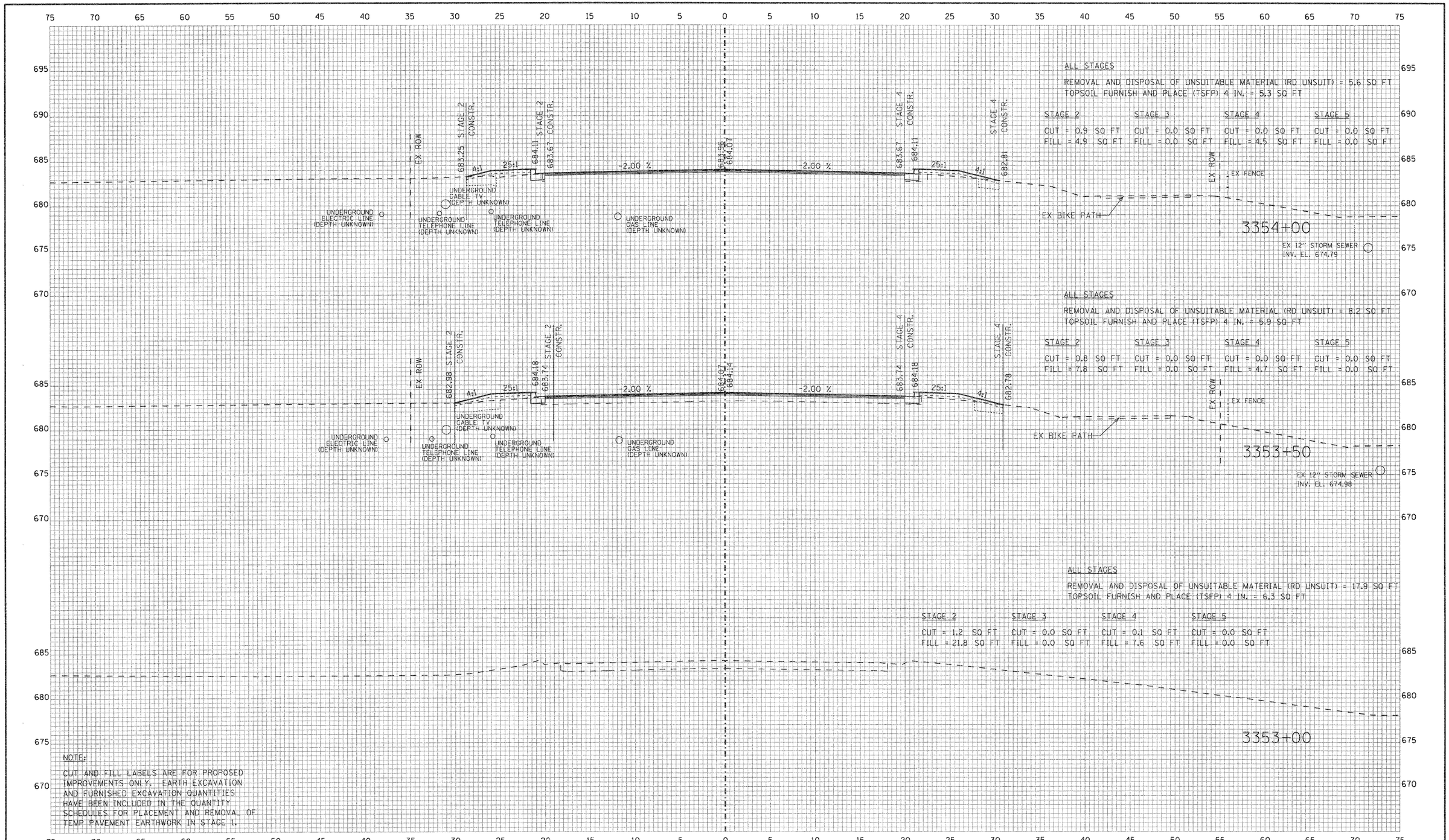
HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4920

LakeCounty
Division of Transportation

EVERETT ROAD
CROSS SECTION STA. 3286+00 TO STA. 3286+86

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	82	107

FILE NAME: $FILE$



NOTE:

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REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES
HORIZ. & VERT.
0 5 10

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4920

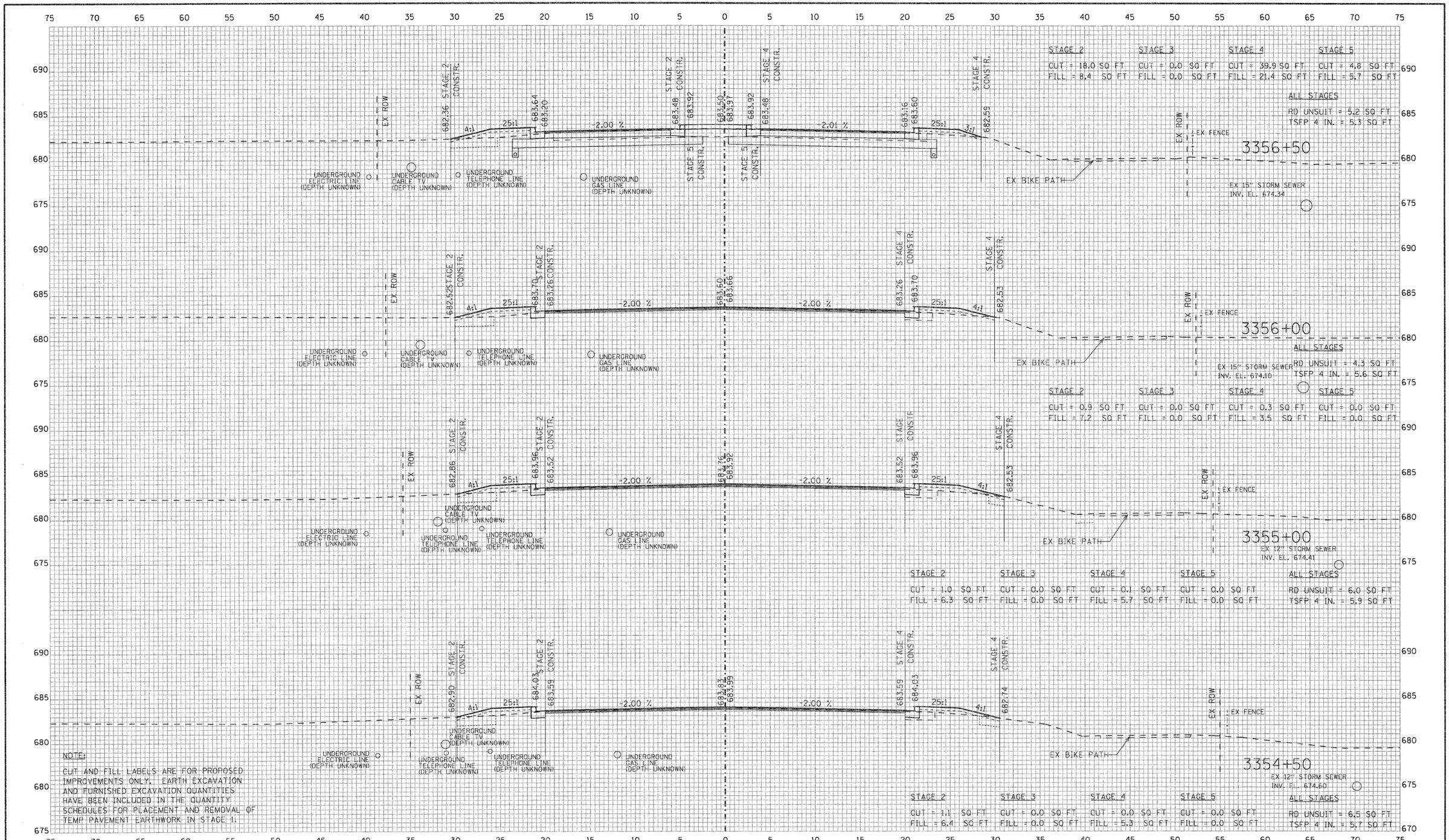
LakeCounty
Division of Transportation

RIVERWOODS ROAD
CROSS SECTION STA. 3353+00 TO STA. 3354+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	83	107

63415

FILE NAME: $FILE$



NOTE:

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REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES
HORIZ. & VERT.
0 5 10

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

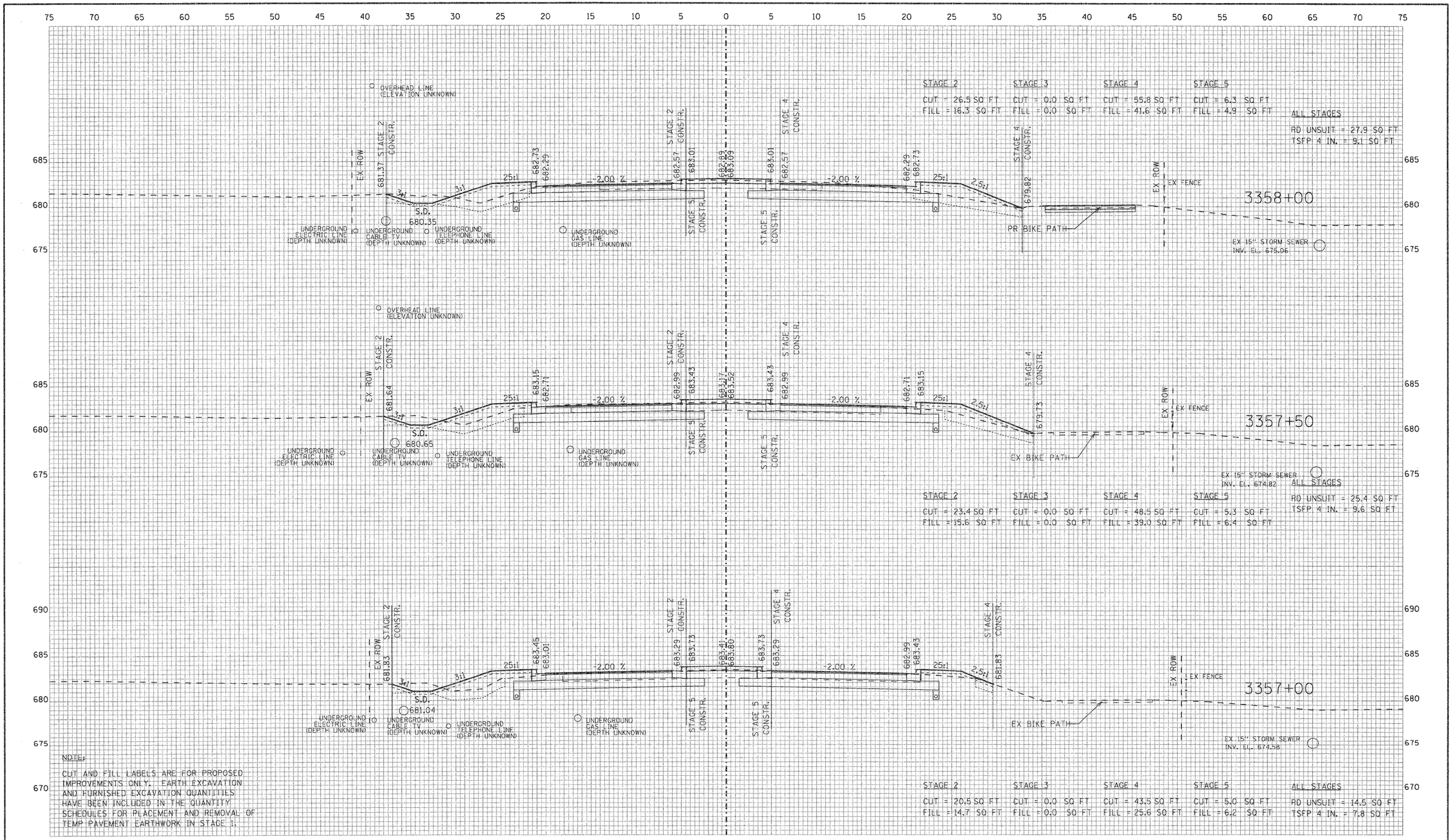
LakeCounty
Division of Transportation

RIVERWOODS ROAD
CROSS SECTION STA. 3354+59 TO STA. 3356+50

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	84	107

6341S

FILE NAME: $FILE$



REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES
HORIZ. & VERT.
0 5 10

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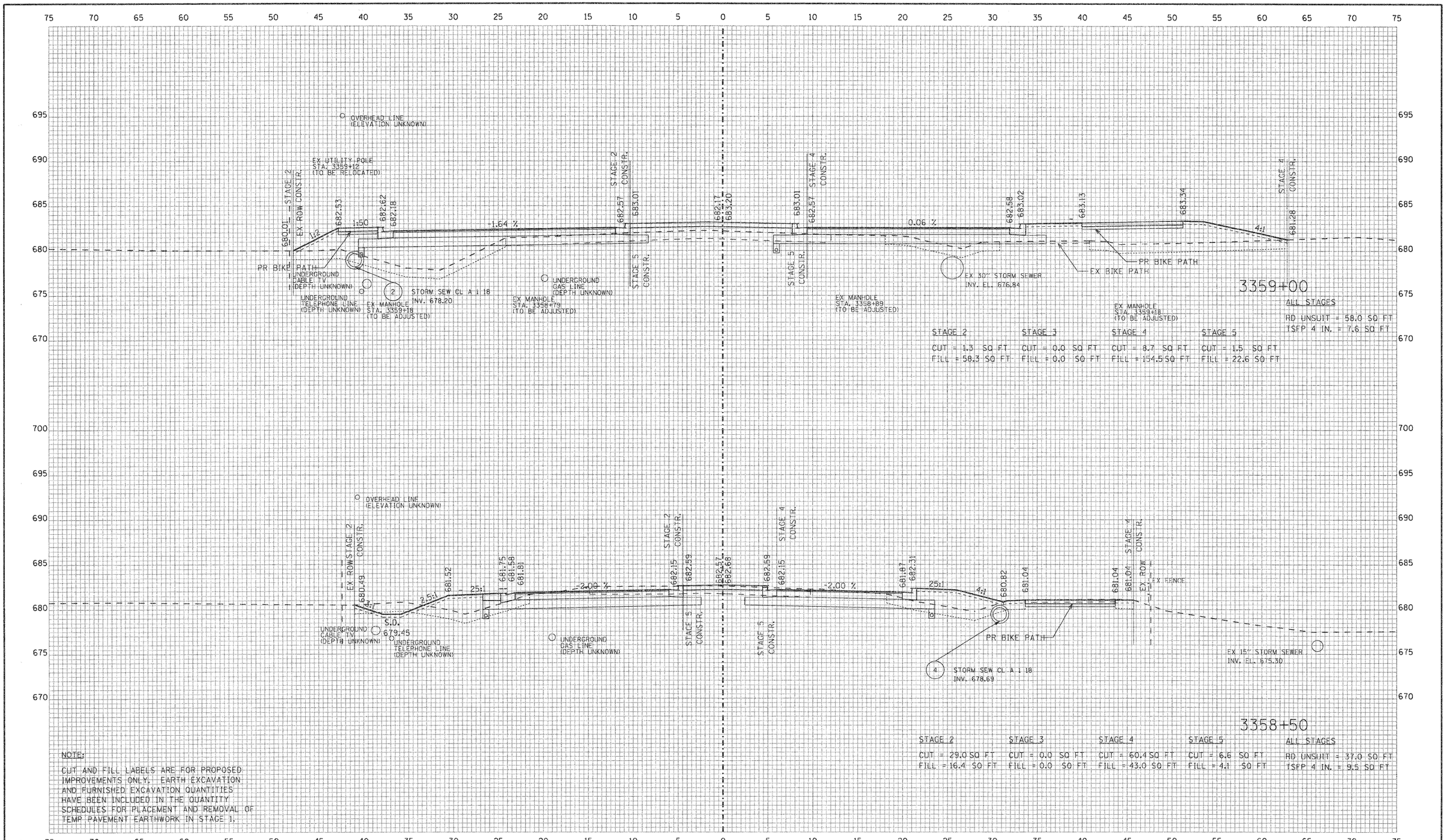
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

RIVERWOODS ROAD
CROSS SECTION STA. 3357+00 TO STA. 3358+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	85	107

FILE NAME: $FILE$



NOTE:

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63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES HORIZ. & VERT. 0 5 10

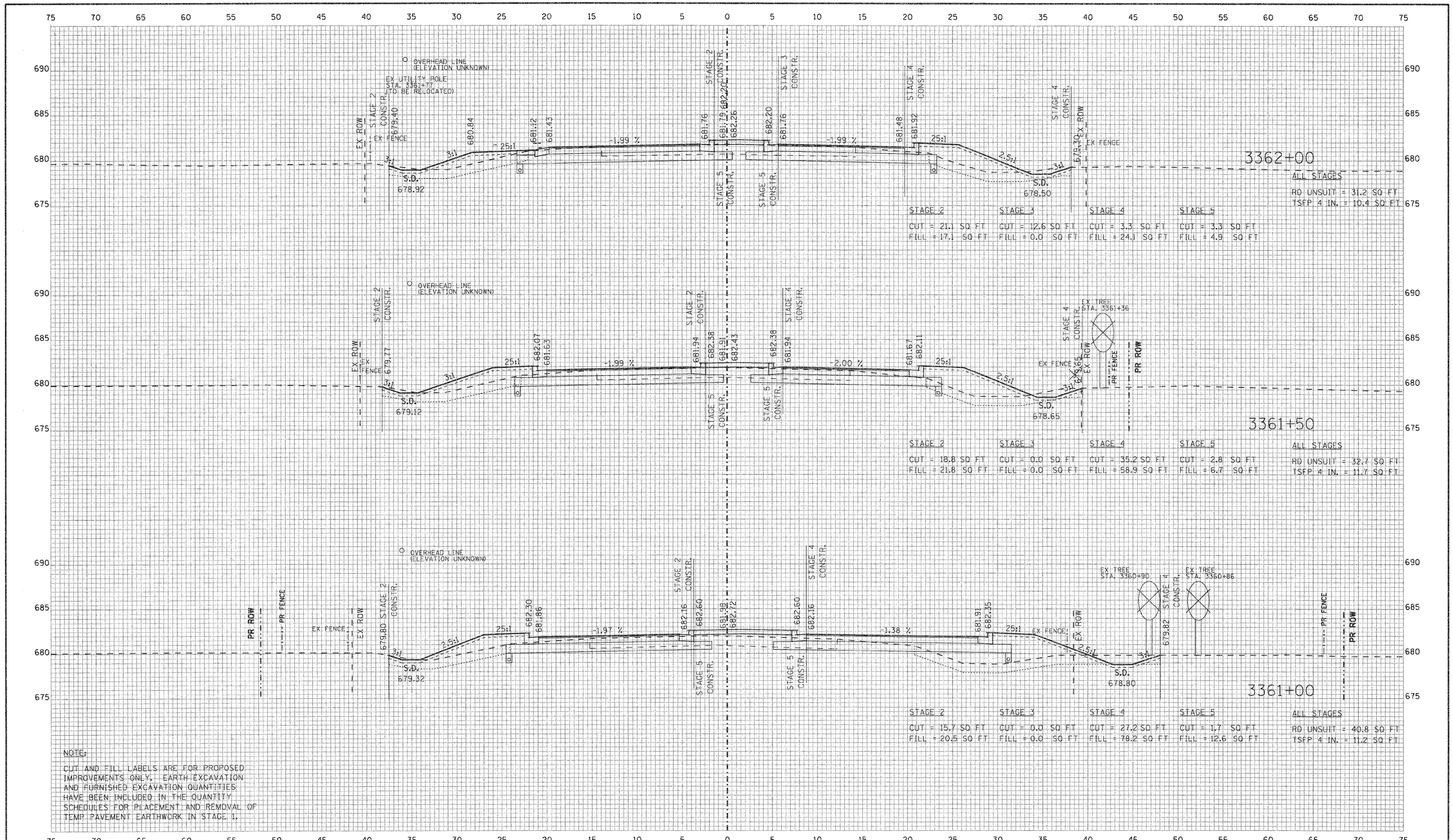
HDR Engineering, Inc. — 30 N LaSalle Street, Suite 3220, Chicago, IL 60602, 312-443-4900

LakeCounty Division of Transportation

RIVERWOODS ROAD — CROSS SECTION STA. 3358+50 TO STA. 3359+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	86	107

FILE NAME: $FILE$



NOTE:

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63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES HORIZ. & VERT. 0 5 10

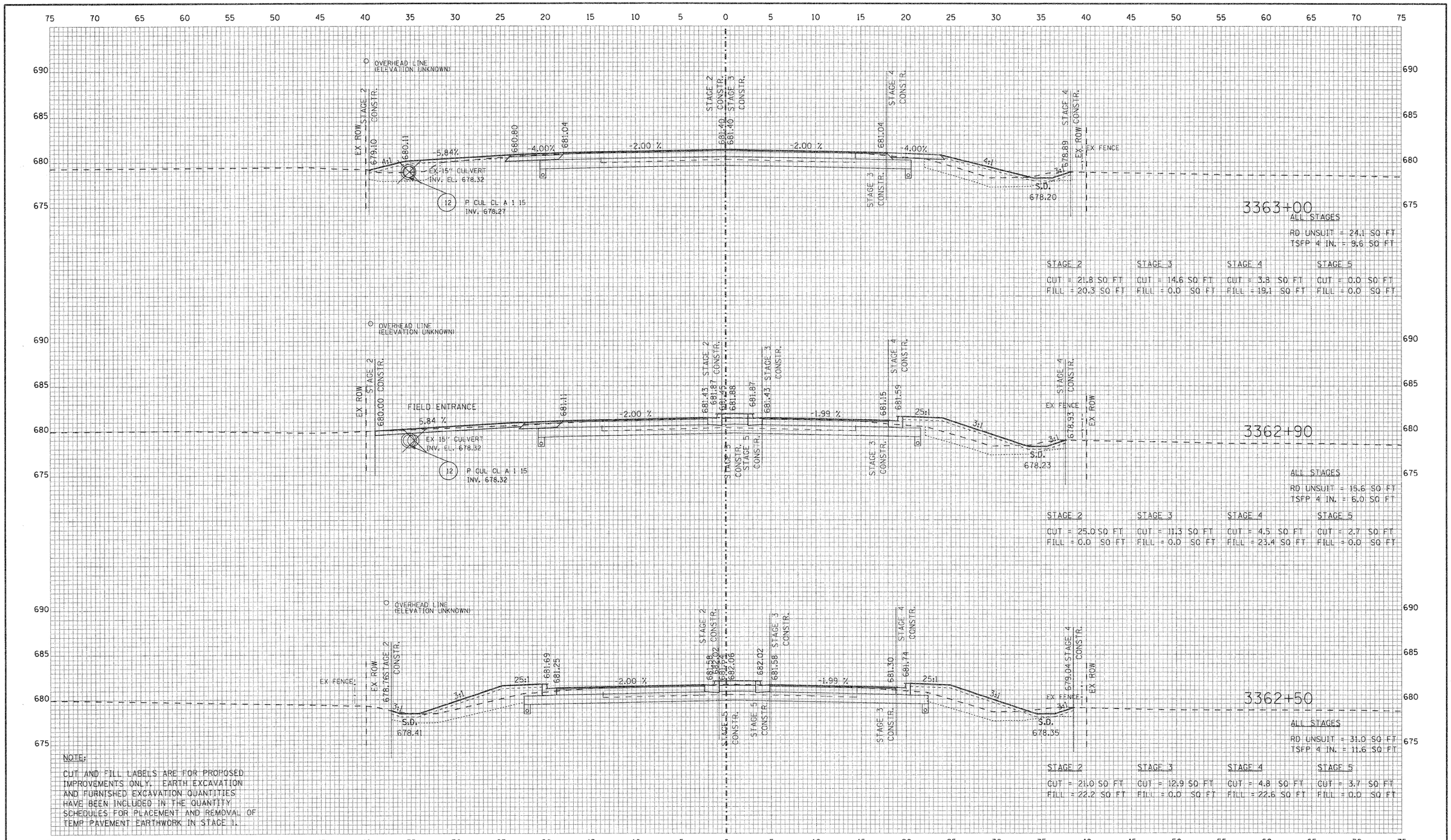
HDR Engineering, Inc. 30 N LaSalle Street, Suite 3220 Chicago, IL 60602 312-443-4900

LakeCounty Division of Transportation

RIVERWOODS ROAD — CROSS SECTION STA. 3361+00 TO STA. 3362+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	87	107

FILE NAME: $FILE$



NOTE:

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LEGEND: - - - - - - - - EXIST. GROUND ..... BOTTOM OF TOPSOIL STRIPPING

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES HORIZ. & VERT. 0 5 10

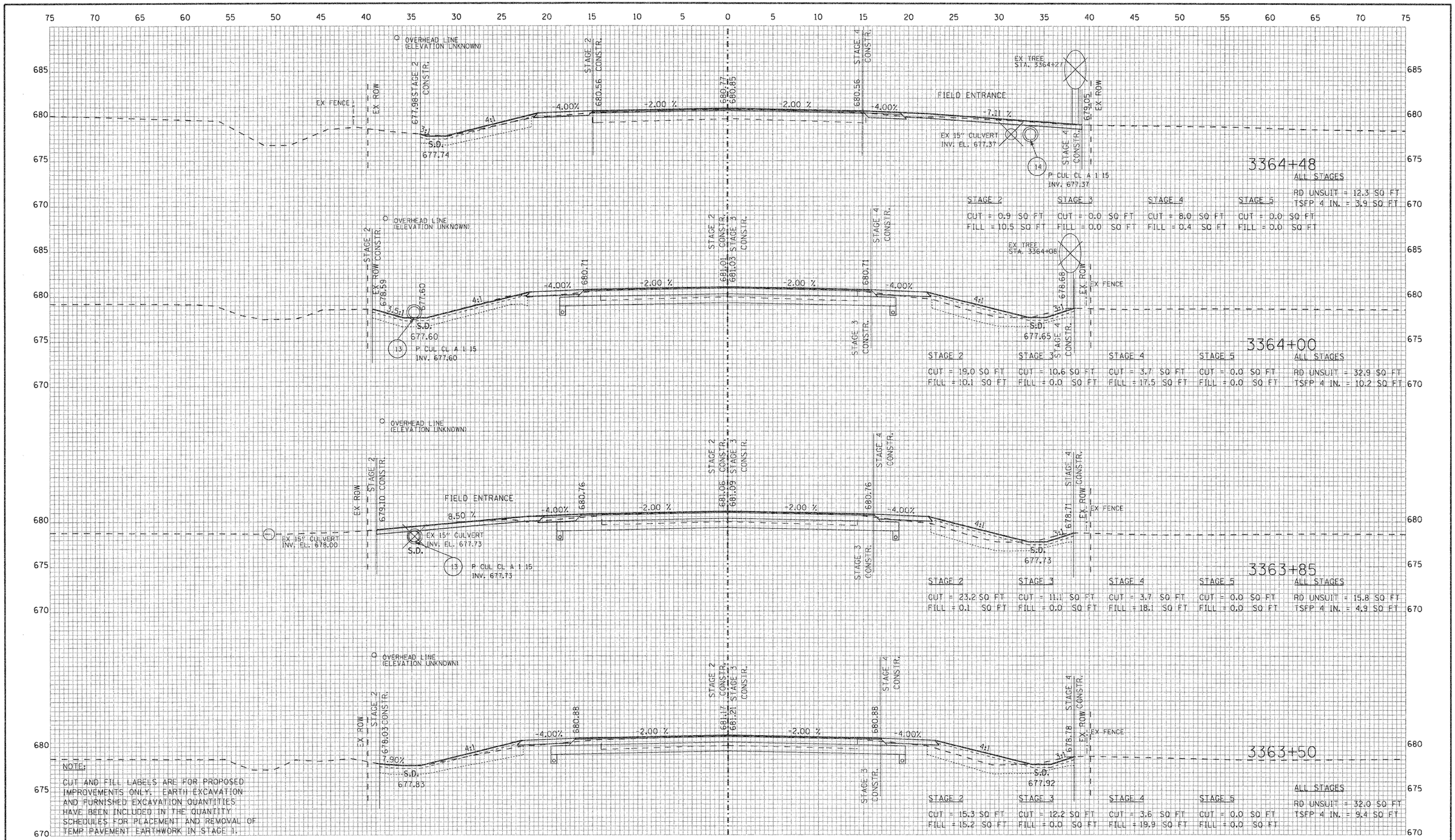
HDR Engineering, Inc. — 30 N LaSalle Street, Suite 3220, Chicago, IL 60602, 312-443-4900

LakeCounty Division of Transportation

RIVERWOODS ROAD — CROSS SECTION STA. 3362+50 TO STA. 3363+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	88	107

FILE NAME: $FILE$



REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES
HORIZ. & VERT.
0 5 10

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4920

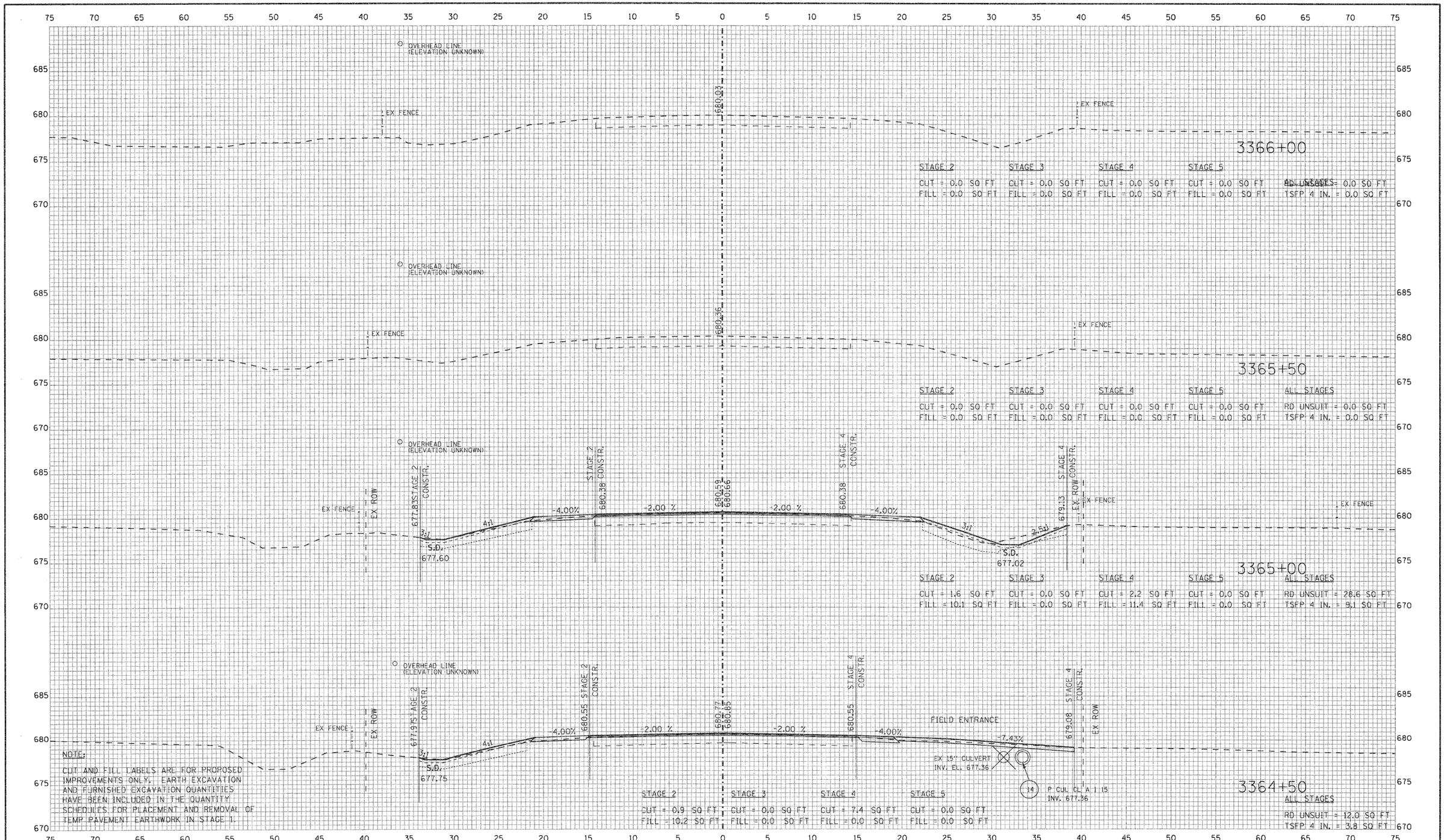
LakeCounty
Division of Transportation

RIVERWOODS ROAD
CROSS SECTION STA. 3363+50 TO STA. 3364+48

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	89	107

68415

FILE NAME: $FILE$



63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

SCALES
HORIZ. & VERT.
0 5 10

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

RIVERWOODS ROAD
CROSS SECTION STA. 3364+50 TO STA. 3366+00

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	90	107

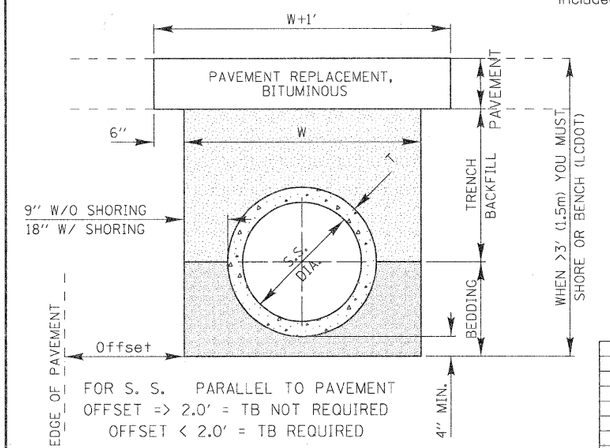
FILE NAME: $FILE$

ENGLISH		TRENCH WIDTH (W)		MIN OFFSET FROM E.O.P.* FOR NO TB		1/2 PIPE AREA [O.D.] (SQ FT)
S.S. DIA.	T	WITHOUT SHORING	WITH SHORING	WITHOUT SHORING	WITH SHORING	
10"	2"	2.67'	4.17'	3.33'	4.08'	0.53
12"	2"	2.83'	4.33'	3.42'	4.17'	0.70
15"	2 1/4"	3.13'	4.63'	3.56'	4.31'	1.04
18"	2 1/2"	3.42'	4.92'	3.71'	4.46'	1.44
21"	2 3/4"	3.71'	5.21'	3.85'	4.60'	1.92
24"	3"	4.00'	5.50'	4.00'	4.75'	2.45
27"	3 1/4"	4.29'	5.79'	4.15'	4.90'	3.06
30"	3 1/2"	4.58'	6.08'	4.29'	5.04'	3.73
36"	4"	5.17'	6.67'	4.58'	5.33'	5.28
42"	4 1/2"	5.75'	7.25'	4.88'	5.63'	7.09
48"	5"	6.33'	7.83'	5.17'	5.92'	9.17

* TO CENTER LINE OF PIPE

DESIGN NOTES:

1. Trench backfill is required if the storm sewer or culvert offset from the edge of the pavement is less than the tabulated values (the inner trench wall is closer than 2' to the edge of pavement)
2. Payment for the trench backfill shall not exceed the quantity computed using the maximum trench width dimensions. If the trench is excavated beyond these limits, the contractor shall furnish and place any additional trench backfill at his/her expence.
3. If the trench width is less than the above maximum values, payment will be based on the actual dimensions of the dug trench.
4. Bedding shall be placed from 4" under the pipe to the spring line of the pipe and is incidental to the corresponding storm sewer or culvert pay item.
5. If any part of the excavation for a drainage structure falls within 2' of the edge of pavement, the space between the side of the excavation and the outer surface of the drainage structure shall be filled with trench backfill. the cost of this item is included in the pay item for the drainage structure.



SCALE: 1" = 2'

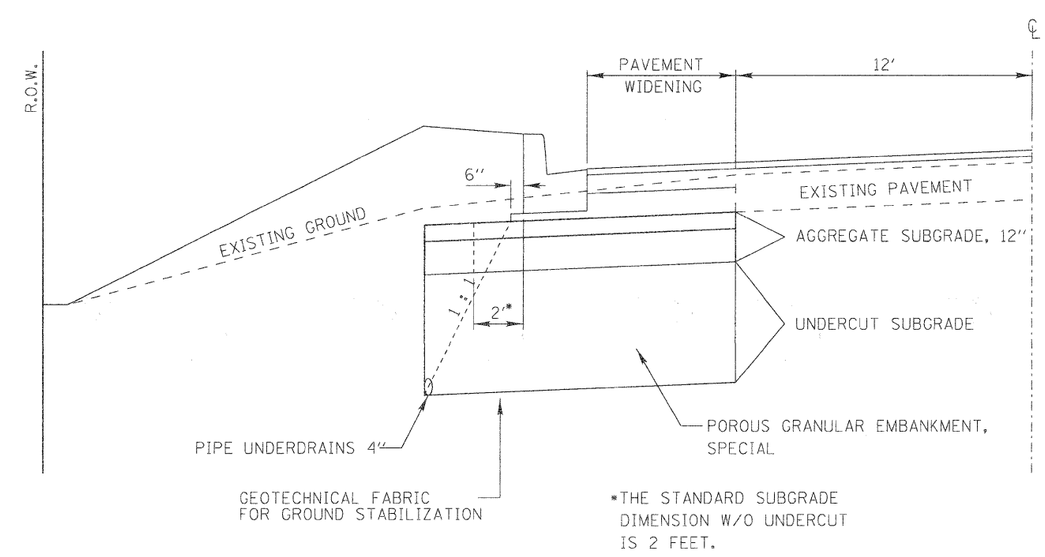
REVISIONS	DATE
Text Revision	11/06/07

LakeCounty Division of Transportation

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

TRENCH WIDTHS FOR TRENCH BACKFILL & PAVEMENT REPLACEMENT, BITUMINOUS

LC0020



*THE STANDARD SUBGRADE DIMENSION W/O UNDERCUT IS 2 FEET.

IN UNSTABLE AREAS, THE SUBGRADE SHALL BE:
- UNDERCUT (PAID FOR AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS PER CU YD);
- REINFORCED WITH GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (PAID FOR PER SQ YD);
- DRAINED BY INSTALLATION OF PIPE UNDERDRAINS, 4" (PAID FOR PER FOOT);
- BACKFILLED WITH POROUS GRANULAR EMBANKMENT, SPECIAL (PAID FOR PER TON) AND;
- TOPPED WITH AGGREGATE SUBGRADE, 12" (300mm) (PAID FOR PER SQ YD).

SCALE:
HORIZONTAL 1" = 5'
VERTICAL 1" = 2.5'

REVISIONS	DATE

LakeCounty Division of Transportation

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

UNDERCUT DETAIL

LC2000

NO.	REVISIONS / REMARKS DESCRIPTION	DATE	BY
		/ /	
		/ /	

DESIGNED BY: JRM
CHECKED BY: MPK/JLC
DATE: 1/22/2010

HDR Engineering, Inc. 30 N. LaSalle Street, Suite 3220 Chicago, IL 60602 312-443-1192

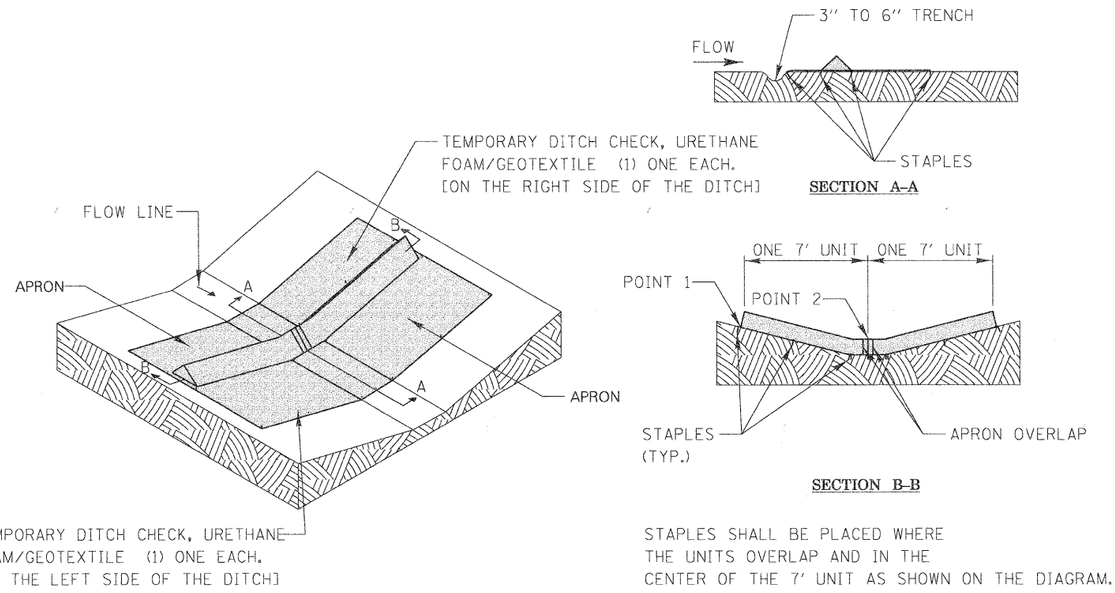
LakeCounty Division of Transportation

LCDOT DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	91	107

63115

FILE NAME:



SILT DIKE UNIT ISOMETRIC

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 TWO (2) EACH TEMPORARY DITCH CHECK, URETHANE FOAM/GEOTEXTILE.

SCALE: 1" = 5'

REVISIONS	DATE

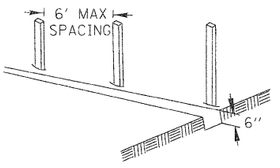
LakeCounty Division of Transportation

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

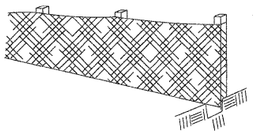
TRIANGULAR SILT DIKE INSTALLATION FOR ROADWAY DITCH OR DRAINAGE DITCH

LC2060

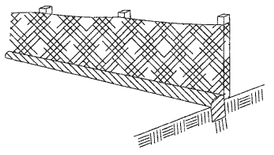
1. SET POSTS AND EXCAVATE OR SLIT-TRENCH A 6-INCH DEEP TRENCH UPSLOPE ALONG THE LINE OF POSTS

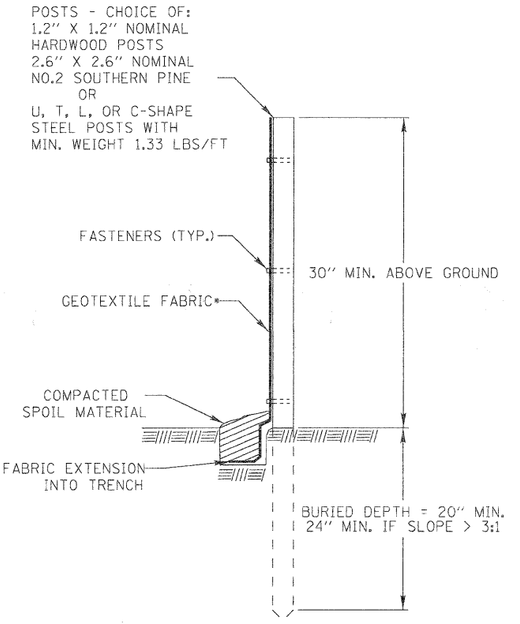


2. ATTACH GEOTEXTILE FILTER FABRIC TO EACH POST WITH A MINIMUM OF 3 (THREE) FASTENERS PER POST AND EXTEND FABRIC TO THE BOTTOM OF THE TRENCH



3. BACKFILL AND COMPACT THE EXCAVATED MATERIALS





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

SCALE 1" = 1'

REVISIONS	DATE
ORIG. by LCSMC	04/21/08

LakeCounty Division of Transportation

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

PERIMETER EROSION BARRIER INSTALLATION

LC2061

REVISIONS / REMARKS DESCRIPTION	DATE	BY
	/ /	
	/ /	

DESIGNED BY: JPM
CHECKED BY: MPK/JLC
DATE: 1/22/2010

FDR
39 N. LaSalle Street Suite 3220
Chicago, IL 60602
312-443-1900
FDR Engineering, Inc.

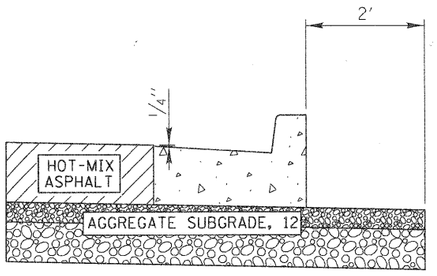
LakeCounty Division of Transportation

LCDOT DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	92	107

63115

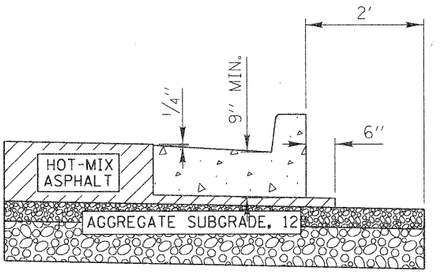
FILE NAME:



TYPICAL METHOD

NOTE:

MINIMUM FLAG THICKNESS 9"



OPTIONAL METHOD

NOTE:
COST OF HOT-MIX ASPHALT MATERIAL UNDER CURB AND 6" OUTSIDE OF CURB TO BE INCIDENTAL TO COST OF COMBINATION CONCRETE CURB AND GUTTER.

SCALE: 1" = 2'

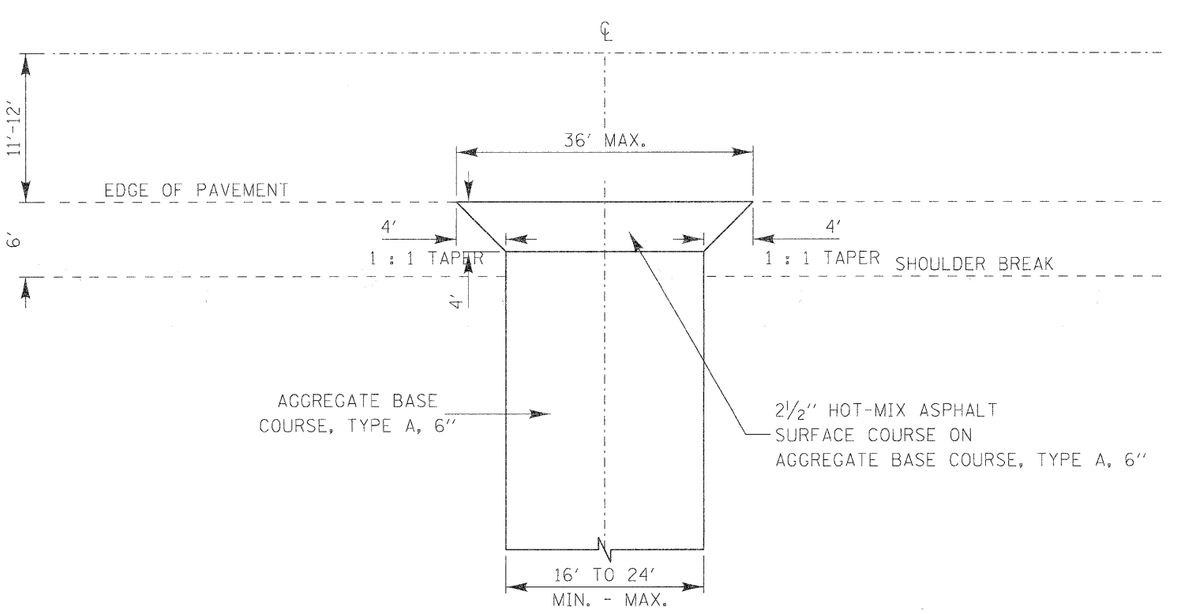
REVISIONS	DATE

LakeCounty Division of Transportation

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

CURB & GUTTER SUBGRADE OPTIONS

LC3000



DESIGN NOTE:

The Hot-Mix Asphalt apron will not be included on roads with a 2' (or wider) paved shoulder. The apron will be constructed behind curb & gutter only when a hot-mix asphalt shoulder is not included.

SCALE: 1" = 10'

REVISIONS	DATE

LakeCounty Division of Transportation

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

HOT-MIX ASPHALT APRON FOR AGGREGATE FIELD ENTRANCE

LC4103

NO.	REVISIONS / REMARKS DESCRIPTION	DATE	BY
		/ /	

DESIGNED BY: JBM
CHECKED BY: MPK/JLC
DATE: 1/22/2010

FILE NAME:

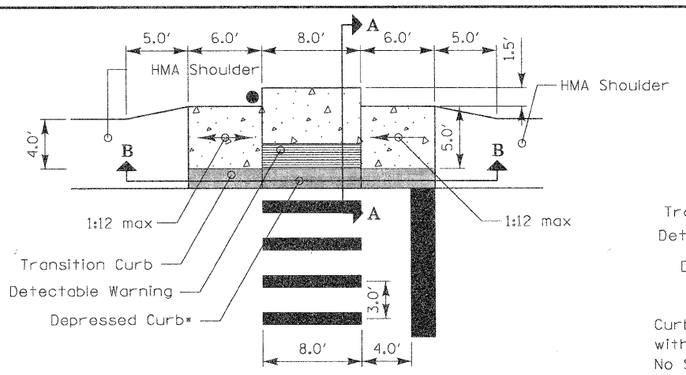
HDR Engineering, Inc.
39 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-1980

LakeCounty Division of Transportation

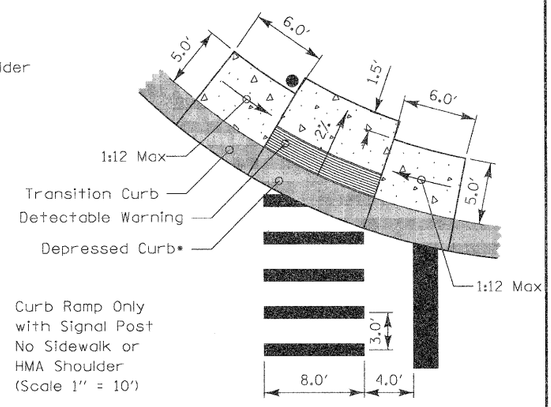
LCDOT DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	93	107

6345

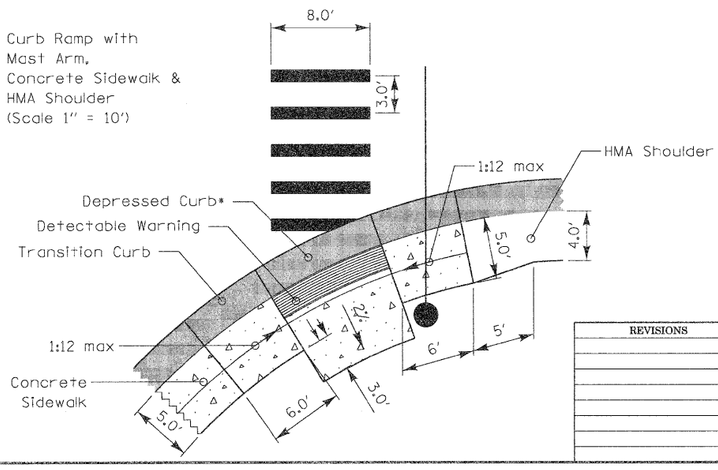


Curb Ramp with Signal Post & Transitions to HMA Shoulders (Scale 1" = 10')



Curb Ramp Only with Signal Post No Sidewalk or HMA Shoulder (Scale 1" = 10')

Curb Ramp with Mast Arm, Concrete Sidewalk & HMA Shoulder (Scale 1" = 10')



*GENERAL NOTES:

1. The gutter slope for the DEPRESSED CURB adjacent to the curb ramp is a maximum of 5% (standard curb and gutter is 6%). The back of curb rise is ½" (standard depressed curb is 1½"). See Section A-A (Sheet 2) and IDOT standard 606001 for the different curb dimensions.
2. The Depressed Curb and the Transition Curb will be paid for as COMBINATION CONCRETE CURB AND GUTTER of the type adjacent to the curb ramp.
3. The concrete area consisting of the landing (2% slope) and the side ramps (behind the transition curb) along with the continuation of the 5' concrete between adjacent ramps (if any) will be measured in square feet and paid for as PORTLAND CEMENT CONCRETE SIDEWALK of the thickness specified.
4. The detectable warnings shall be installed inaccordance with Article 424.09 of the IDOT Standard Specifications and the LCDOT specification 42400800 DETECTABLE WARNINGS and shall be measured and paid for per square foot.
5. Since the width of the flag doesn't affect the construction of the ramp, both B-6.12 and B-6.24 Curb & Gutter are portrayed in this standard.

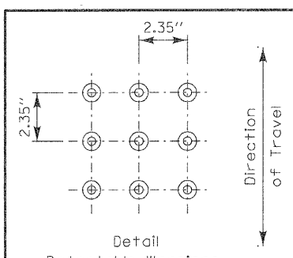
REVISIONS	DATE

LakeCounty Division of Transportation

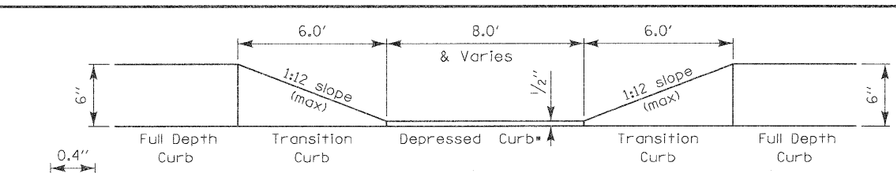
APPROVED BY: M. G. ZEMAITIS
DATE: APRIL 1, 2007

CURB RAMPS with TRAFFIC SIGNAL POSTS & MAST ARMS
(SHEET 1 OF 2)

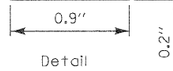
LC4201



Detail
Detectable Warnings
Square Pattern
(Scale 1" = 6")

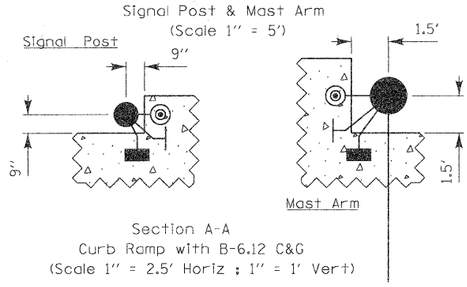


Section B-B
Curb Ramp - Face of Curb
(Scale 1" = 2.5' Horiz ; 1" = 1' Vert)

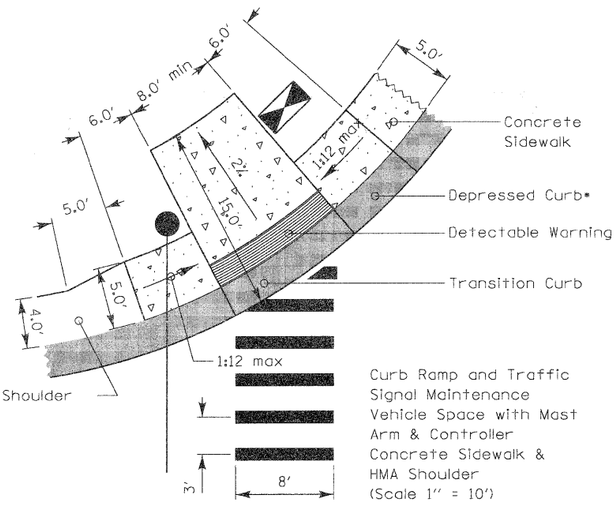


Detail
Truncated Dome
(Scale 1" = 1")

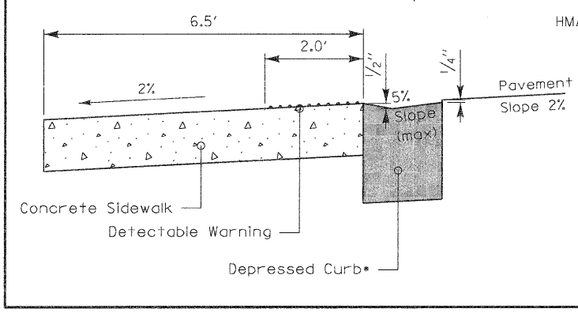
Location Details
Signal Post & Mast Arm
(Scale 1" = 5')



Section A-A
Curb Ramp with B-6.12 C&G
(Scale 1" = 2.5' Horiz ; 1" = 1' Vert)



Curb Ramp and Traffic Signal Maintenance Vehicle Space with Mast Arm & Controller Concrete Sidewalk & HMA Shoulder (Scale 1" = 10')



REVISIONS	DATE

LakeCounty Division of Transportation

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

CURB RAMPS with TRAFFIC SIGNAL POSTS & MAST ARMS
(SHEET 2 OF 2)

LC4201

NO.	REVISIONS / REMARKS DESCRIPTION	DATE	BY
		/ /	
		/ /	

DESIGNED BY: JRM
CHECKED BY: MPK/JLC
DATE: 1/22/2010

HDR Engineering, Inc.
38 N. LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

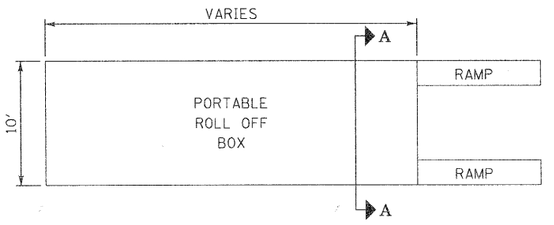
LakeCounty Division of Transportation

LCDOT DETAILS

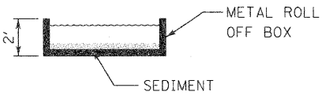
ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	94	107

63115

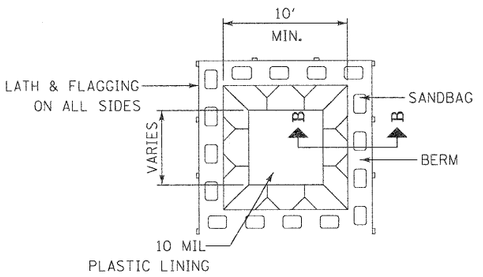
FILE NAME:



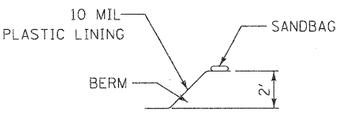
PLAN VIEW — PREFAB PORTABLE WASHOUT



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

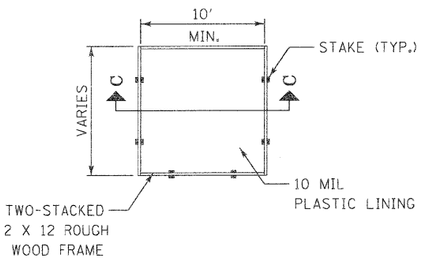
REVISIONS	DATE

LakeCounty Division of Transportation — APPROVED BY: MGZ — DATE: March 17, 2008

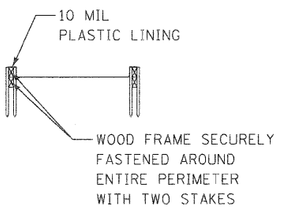
CONCRETE WASHOUT FACILITIES

SHEET 1 OF 2

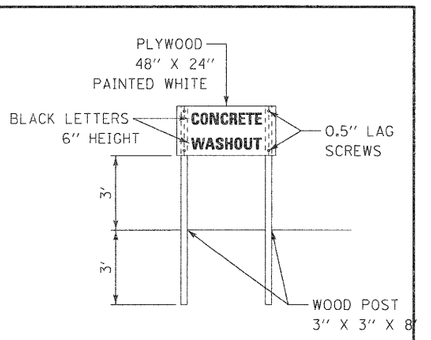
LC4202



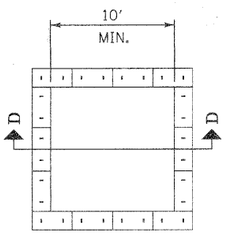
PLAN VIEW — ABOVE GRADE



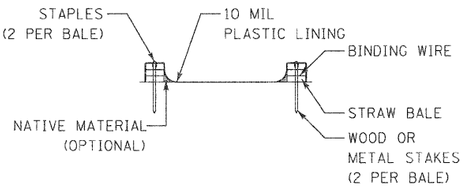
SECTION C-C



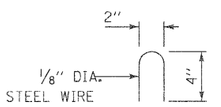
CONCRETE WASHOUT SIGN DETAIL (OR EQUIVALENT)



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: MGZ — DATE: March 17, 2008

CONCRETE WASHOUT FACILITIES

SHEET 2 OF 2

LC4202

FILE NAME:

NO.	REVISIONS / REMARKS DESCRIPTION	DATE	BY
		/ /	
		/ /	

DESIGNED BY: JRM
CHECKED BY: MPK/JLC
DATE: 1/22/2010

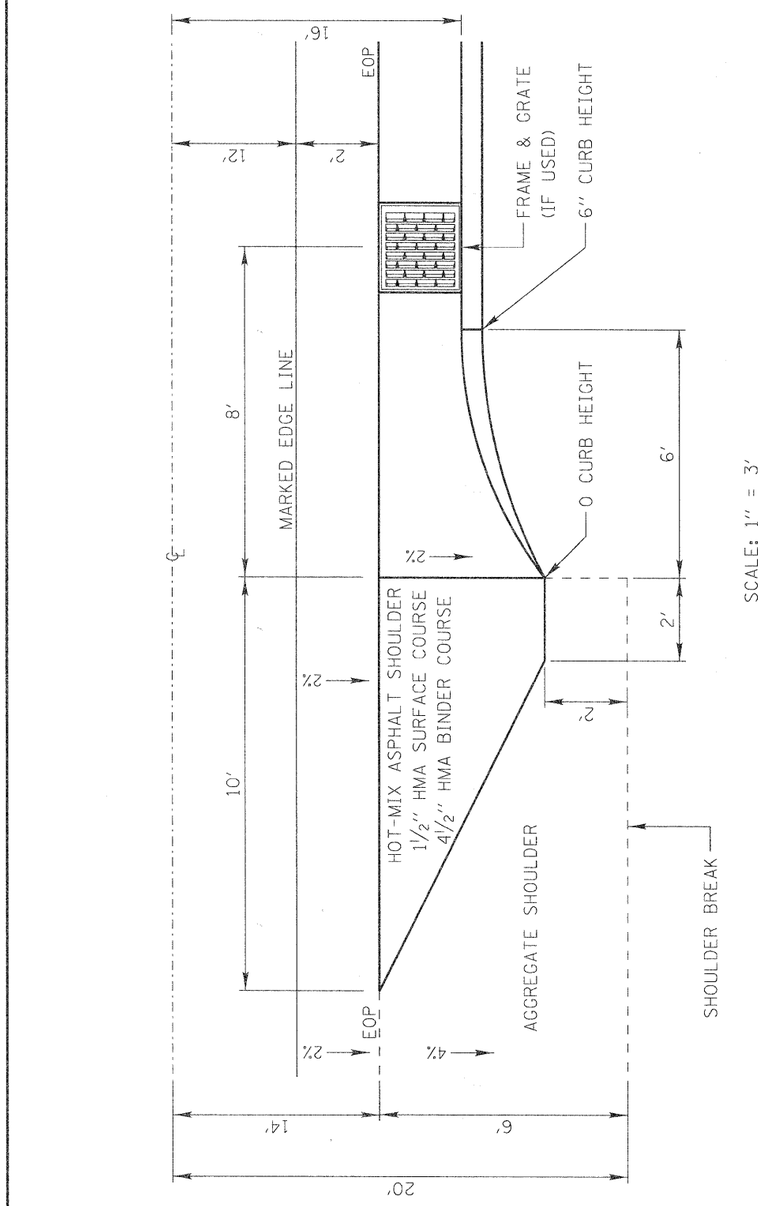
HDR Engineering, Inc. — 30 N. LaSalle Street, Suite 3220, Chicago, IL 60602, 312-443-4908

LakeCounty Division of Transportation

LCDOT DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	95	107

63415



SCALE: 1" = 3'

LC4800

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

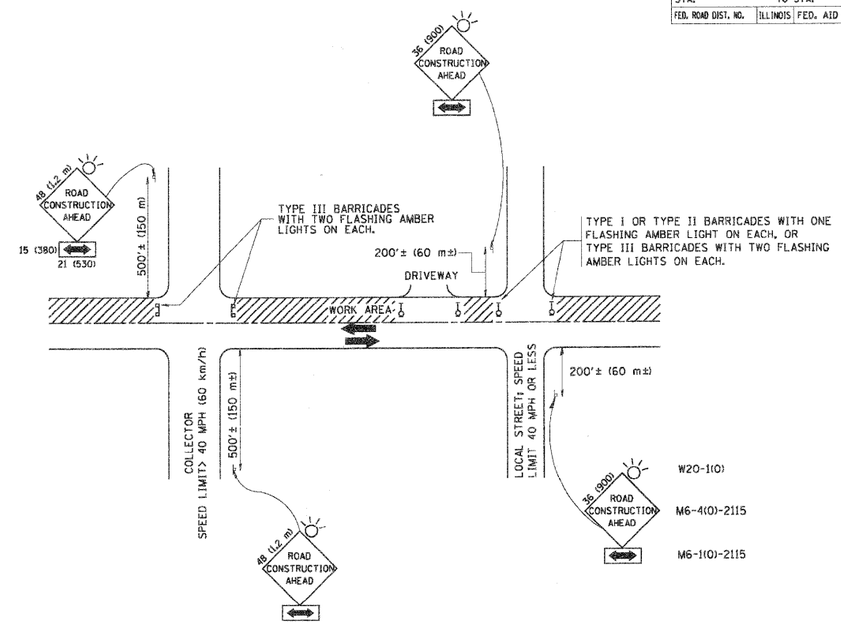
LakeCounty
Division of Transportation

TRANSITION FROM AGGREGATE SHOULDER TO B-6.24 FOR 16' OFFSET TO FACE

REVISIONS	DATE

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: NONE

DRAWN BY

CHECKED BY

TC-10

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

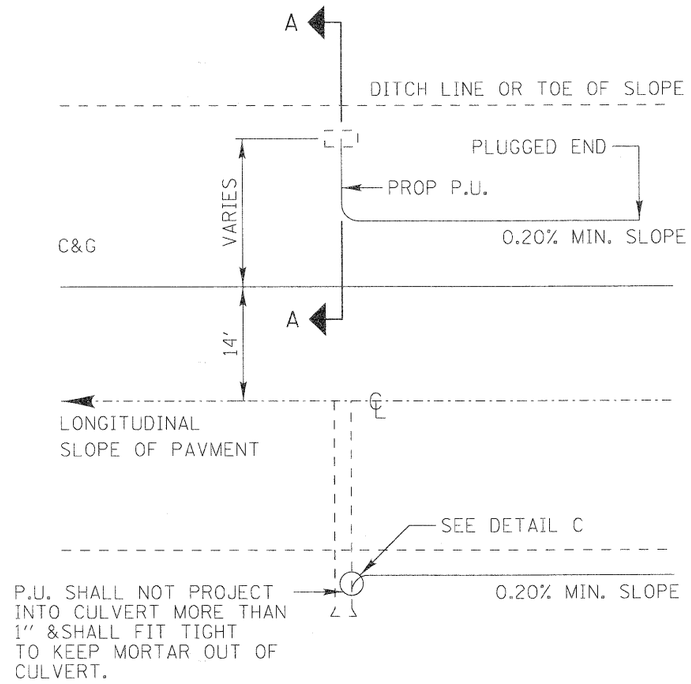
HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

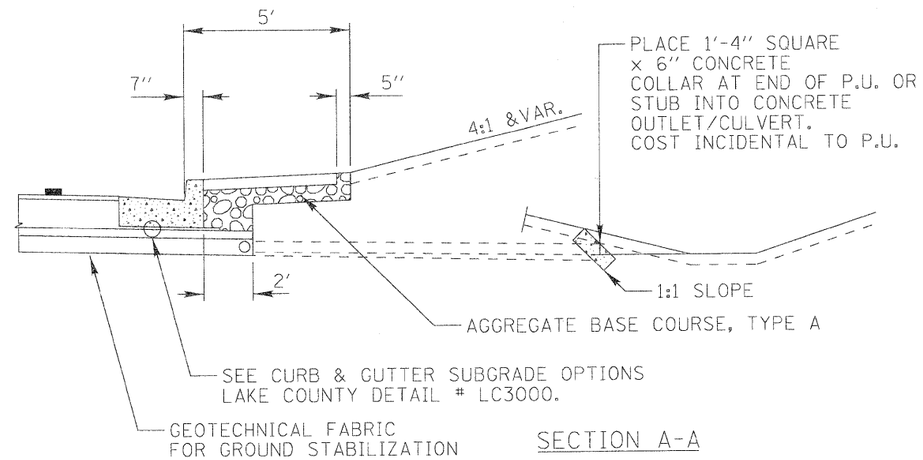
LCDOT AND IDOT DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	96	107

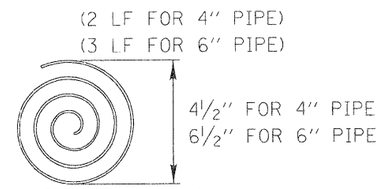
FILE NAME:



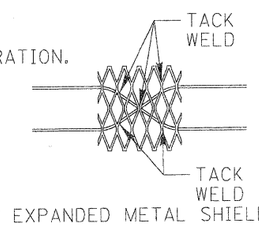
TYPICAL PIPE UNDERDRAIN OUTLET



SECTION A-A



3/16" WIRE STOCK BENT TO A SPIRAL CONFIGURATION.
TO INSTALL, TWIST INTO DRAIN TILE END.
(FOR CORRUGATED CIRCULAR METAL PIPE)



6"x6" EXPANDED METAL SHIELD WITH
TWO 2'-6" LONG PREFABRICATED
6 GAGE STEEL STRUTS FOR SNUG FIT
INTO THE DRAIN TILE END.

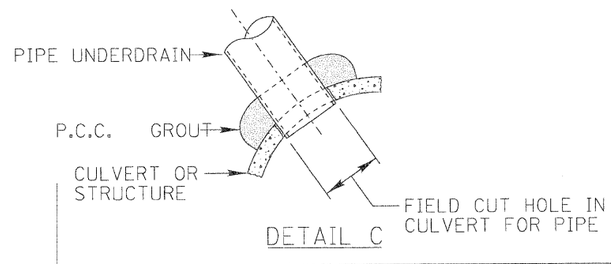
RODENT SHIELDS DETAIL
(ALTERNATES)
NOT TO SCALE

DESIGN NOTES:

All work to be in accordance with the applicable portions of the standard specifications except as modified hereon.

In addition to the requirements of article 601.08 of the standard specifications, the contract unit price per foot for pipe underdrains 4" shall include the cost for furnishing and placing the rodent shield.

The removable rodent shield shall be furnished and installed in accordance with one of the configurations shown. The shield shall be fabricated from steel wire, or expanded metal, as detailed above and shall be galvanized after fabrication in accordance with AASHTO M-111. Other submitted designs for a removable rodent shield will be allowed with the approval of the engineer.



DETAIL C

REVISIONS	DATE

LakeCounty
Division of Transportation

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

SUB-SURFACE DRAINS

LC6020

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

HDR
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900
HDR Engineering, Inc.

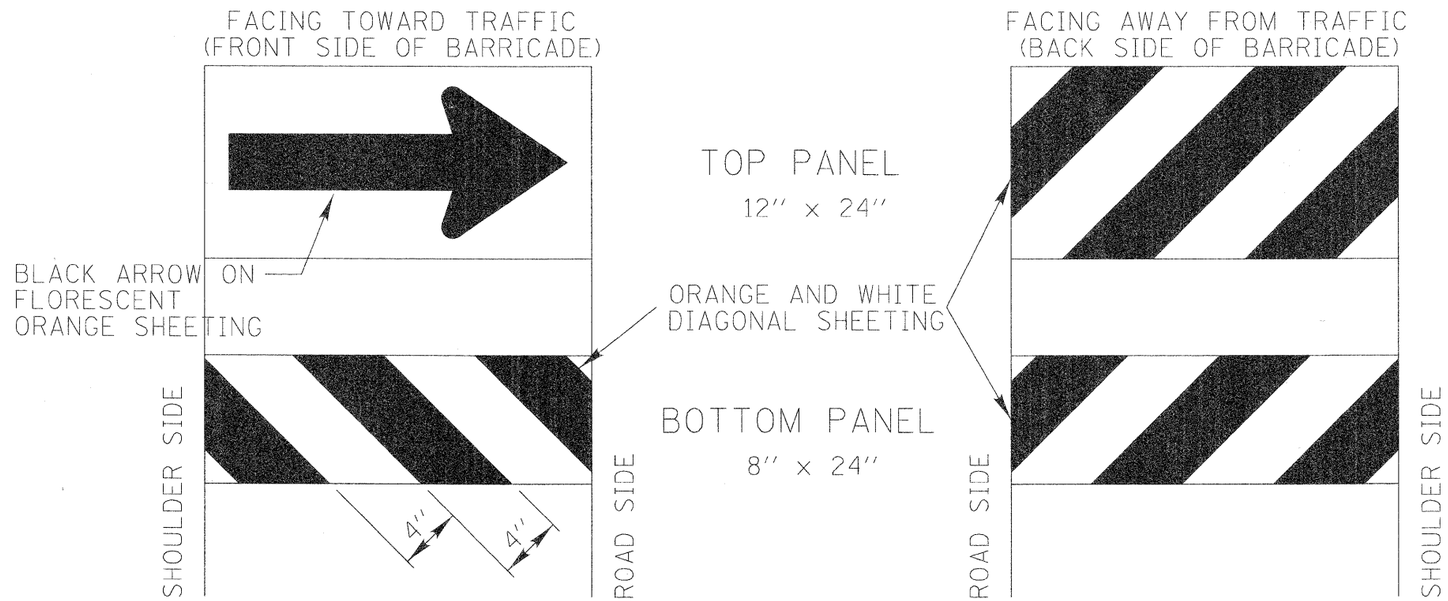
LakeCounty
Division of Transportation

LCDOT DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	97	107

FILE NAME:

DIRECTION INDICATOR BARRICADES

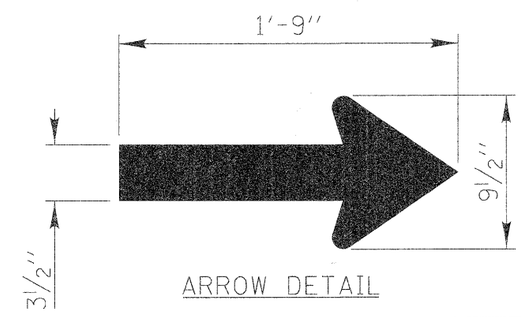


GENERAL NOTES

1) Direction Indicator Barricades shall be constructed from non-metallic Type II barricades meeting the requirements of Article 1106.02 of the Standard Specifications, except where modified by this detail.

2) The Direction Indicator Barricades shall be equipped with Type C steady burning lights if used to channelize traffic during the hours of darkness.

3) The reflective sheeting for the top panel shall be Type AZ fluorescent orange. The diagonal panels shall have orange and white Type A or better reflective sheeting.



ARROW DETAIL

REVISIONS	DATE

LakeCounty Division of Transportation

APPROVED BY: ANTHONY KHAWAJA
DATE: APRIL 1, 2007

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
HIGHWAY CONSTRUCTION, CONTRACT MAINTENANCE

DIRECTION INDICATOR BARRICADES

LC7200

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

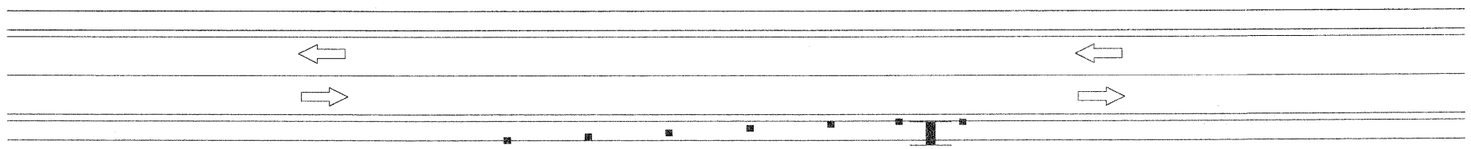
FILE NAME:

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty Division of Transportation

LCDOT DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	98	107



SHOULDER CLOSURE TAPER

SHOULDER TAPER LENGTH TABLE		
POSTED SPEED	TAPER LENGTH	NUMBER OF DEVICES REQUIRED
30 MPH	40 FEET	4
35 MPH	55 FEET	4
40 MPH	70 FEET	5
45 MPH	120 FEET	7
50 MPH	135 FEET	8
55 MPH	150 FEET	8

GENERAL NOTES

This special detail is intended for use with a Changeable Message Sign and its Support trailer when located on the shoulder or within 15 feet of the edge line of a county highway without curb and gutter.

The Shoulder Taper (1/3 L) length is shown in the table for the current posted speed limit.

The Channelizing Device Spacing shall not exceed 25 feet for the Shoulder Taper.

SYMBOLS

CHANGEABLE MESSAGE SIGN

CHANNELIZING DEVICE

MODIFIED M.U.T.C.D. TYPICAL APPLICATION DIAGRAM TA-3

REVISIONS	DATE		
		LakeCounty Division of Transportation	APPROVED BY: A. KHAWAJA DATE: JAN. 28, 2008
		TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES HIGHWAY CONSTRUCTION, CONTRACT MAINTENANCE AND UTILITY OPERATIONS	LC7202
		SHOULDER CLOSURE AND TAPER FOR CHANGEABLE MESSAGE SIGNS	

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

HDR Engineering, Inc. 30 N LaSalle Street, Suite 3220 Chicago, IL 60602 312-443-4900

LakeCounty Division of Transportation

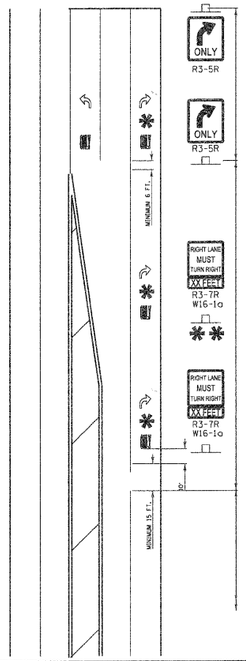
LCDOT DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	99	107

FILE NAME:

TYPICAL PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS

THRU LANE TO TURN LANE CONVERSION



TURN BAY
6" WHITE LINE
(ADDITIONAL PAV'T MARKINGS AS SHOWN ON SHEET ONE OF THE L.C.D.O.T PAV'T MARKINGS DETAIL SHEETS)

TRANSITION ZONE
6" WHITE 3'/12' SKIP DASH
LANE LINE

THRU LANE
4 " WHITE 10'/30' SKIP DASH
LANE LINE

MINIMUM TRANSITION ZONE LENGTH

POSTED SPEED	LENGTH
25 M.P.H.	255 FT.
30 M.P.H.	330 FT.
35 M.P.H.	405 FT.
40 M.P.H.	480 FT.
45 M.P.H.	555 FT.
50 M.P.H.	630 FT.
55 M.P.H.	705 FT.

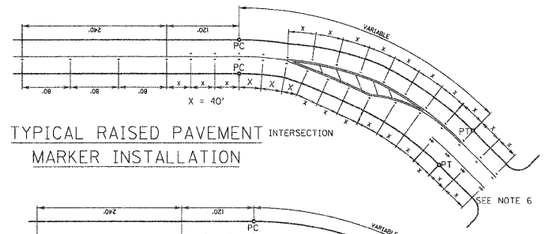
* LOCATION OF PAV'T MARKINGS

(MEASURED FROM BEGINNING OF TRANSITION ZONE)

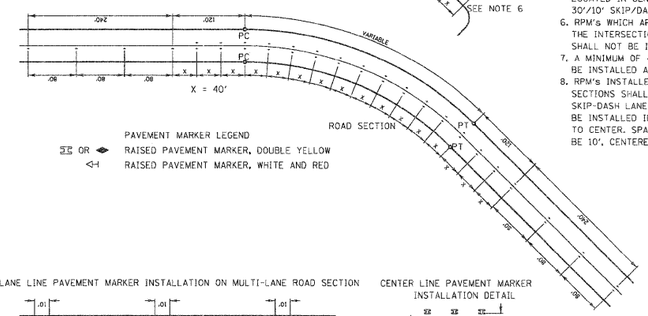
POSTED SPEED	LOCATION OF PAV'T MARKINGS
25 M.P.H.	10 FT., 260 FT.
30 M.P.H.	10 FT., 170 FT., 340 FT.
35 M.P.H.	10 FT., 210 FT., 410 FT.
40 M.P.H.	10 FT., 170FT., 330 FT., 490 FT.
45 M.P.H.	10 FT., 190 FT., 370 FT., 560 FT.
50 M.P.H.	10 FT., 170 FT., 330 FT., 490 FT., 640 FT
55 M.P.H.	10 FT., 180 FT., 350 FT., 520 FT., 710 FT.

FOR POSTED SPEEDS 40 M.P.H. OR GREATER A SECOND R3-7/W16-1a SIGN INSTALLATION SHALL BE LOCATED HALFWAY BETWEEN THE BEGINNING OF THE TRANSITION ZONE AND THE BEGINNING OF THE TURN LANE

TYPICAL RAISED PAVEMENT MARKER INSTALLATION



INTERSECTION

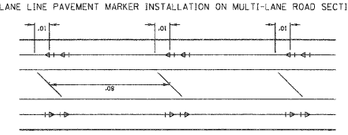


PAVEMENT MARKER LEGEND

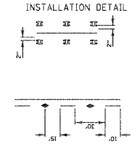
OR RAISED PAVEMENT MARKER, DOUBLE YELLOW

RAISED PAVEMENT MARKER, WHITE AND RED

LANE LINE PAVEMENT MARKER INSTALLATION ON MULTI-LANE ROAD SECTION

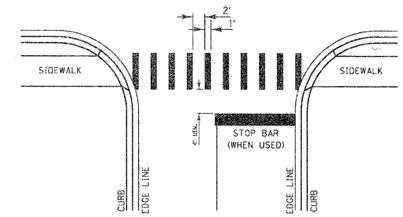


CENTER LINE PAVEMENT MARKER INSTALLATION DETAIL



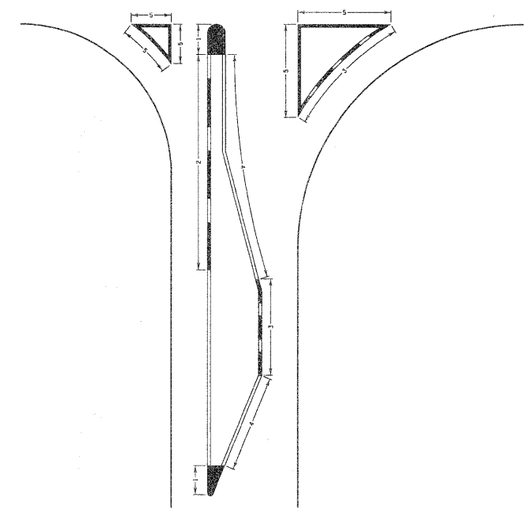
NOTES:
1. CENTERLINE RAISED PAVEMENT MARKERS (RPM's) SHALL BE PLACED ON ALL CURVES OVER 3 1/2 DEGREES ON ALL TWO AND THREE LANE HIGHWAYS, UNLESS DIRECTED OTHERWISE BY THE ENGINEER..
2. SPACING = 40' FOR CENTERLINE MARKERS.
3. ALL RPM'S ON CENTERLINE ARE 2-WAY YELLOW. LANE LINE MARKERS ARE WHITE/RED.
4. MARKERS SHALL BE INSTALLED IN ACCORDANCE WITH F.H.W.A. MEMORANDUM HIO-21.
5. MARKERS SHALL BE FIELD ADJUSTED TO BE LOCATED IN CENTER OF THE 30' GAP OF A 30'/10' SKIP/DASH CENTERLINE.
6. RPM's WHICH ARE TO BE LOCATED WITHIN THE INTERSECTION OF A CROSS STREET, SHALL NOT BE INSTALLED.
7. A MINIMUM OF 4 WHITE/RED MARKERS SHALL BE INSTALLED ALONG THE TURN LANE LINE.
8. RPM's INSTALLED ON MULTI-LANE ROAD SECTIONS SHALL BE INSTALLED ON THE WHITE SKIP-DASH LANE LINE ONLY. THESE RPM's SHALL BE INSTALLED IN PAIRS AND SHALL BE 80' CENTER TO CENTER. SPACING WITHIN EACH PAIR SHALL BE 10', CENTERED WITHIN THE 30' SKIP.

CROSSWALKS



1. WIDTH OF THE CROSSWALK IS GENERALLY 6' EXCEPT AT SCHOOL CROSSINGS AND BICYCLE CROSSINGS, WHICH CAN BE 8' .
2. THE STOP BAR SHOULD BE INSTALLED A MINIMUM OF 4' IN ADVANCE OF THE CROSSWALK.

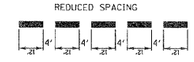
CURB MARKING



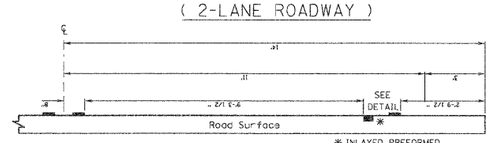
NOTES:
1. PAINT CURB AND NOSE SOLID FOR 10' OR RADIUS OF NOSE, WHICHEVER IS GREATER.
2. PAINT MINIMUM OF 3 STRIPES IN DIRECTION OF TRAFFIC.
3. REDUCED SPACING USED TO OBTAIN 3 STRIPE MINIMUM.
4. STRIPING RECOMMENDED ONLY WHERE OPERATIONAL PROBLEMS DICTATE.
5. PAINT SOLID WHERE A MINIMUM OF 3 STRIPES CANNOT BE PLACED.

NORMAL SPACING

REDUCED SPACING

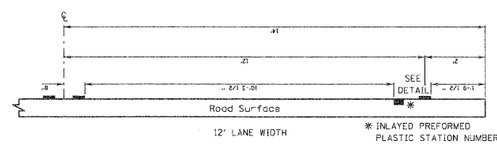


PAVEMENT CROSS SECTION SHOWING TYPICAL PAVEMENT MARKINGS (2-LANE ROADWAY)



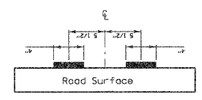
1 1' LANE WIDTH

* INLAYED PREFORMED PLASTIC STATION NUMBER

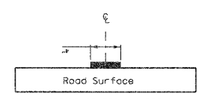


12' LANE WIDTH

* INLAYED PREFORMED PLASTIC STATION NUMBER



DOUBLE STRIPE CENTERLINE DETAIL



SINGLE STRIPE CENTERLINE DETAIL

Note:
Centerline markings are 4" lines at 11" centers.

STATIONING DETAIL

PAVEMENT MARKING GUIDELINES				
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE OF 2 LANE PAVEMENT	4 IN.	SKIP-DASH	YELLOW	10 FT.LINE WITH 30 FT.SPACE
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 IN. 2 @ 4 IN.	SOLID SOLID	YELLOW YELLOW	5 1/2 IN.C-C FROM SKIP-DASH CENTERLINE 11IN.C-C (OMIT SKIP-DASH CENTERLINE BETWEEN)
CENTERLINE ON MULTI-LANE UNDIVIDED	2 @ 4 IN.	SOLID	YELLOW	11IN.C-C
LANE LINES	4 IN.	SKIP-DASH	WHITE	10 FT.LINE WITH 30 FT.SPACE
DOTTED LINES (EXTENSIONS OF CENTER,LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2 FT.LINE WITH 6 FT.SPACE
EDGE LINES	5 IN.WHITE 4 IN.YELLOW	SOLID	WHITE - RIGHT YELLOW - LEFT	OUTLINE RAISED MEDIANS IN YELLOW
TURN LANE MARKINGS	6 IN.LINE FULL SIZE LETTERS AND SYMBOLS (8 FT.)	SOLID	WHITE	TURN ARROW 15.6 SQ.FT. STRAIGHT ARROW 11.5 SQ.FT. ONLY 20.8 SQ.FT. COMB.ARROW 26.0 SQ.FT.
TWO WAY LEFT TURN MARKING	2 @ 4 IN.EACH DIRECTION 8 FT.LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10 FT.LINE WITH 30 FT.SPACE FOR SKIP-DASH 5 1/2 IN.C-C BETWEEN SKIP-DASH LINE AND SOLID LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK	12 IN.@ 90°	SOLID	WHITE	12 IN.LONGITUDINAL BAR WITH 24 IN.SPACE 6 FT.TO 12 FT.WIDE SEE TYPICAL CROSSWALK MARKING DETAIL
STOP BARS	24 IN.	SOLID	WHITE	PLACE 4 FT.IN ADVANCE OF AND PARALLEL TO CROSSWALK,IF PRESENT.OTHERWISE PLACE AT DESIRED STOPPING POINT.
PAINTED MEDIANS	2 @ 4 IN.WITH 11IN. DIAGONALS @ 45° NO DIAGONALS USED FOR 4 FT.WIDE MEDIAN	SOLID	YELLOW - 2-WAY TRAFFIC WHITE - 1-WAY TRAFFIC	11IN.C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING DETAIL MINIMUM OF 5 DIAGONALS
GORE MARKING AND CHANNELIZING LINES	8 IN.WITH 12 IN. DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS 15 FT.C-C (LESS THAN 30 M.P.H.) 20 FT.C-C (30 TO 45 M.P.H.) 30 FT.C-C (OVER 45 M.P.H.) MINIMUM OF 5 DIAGONALS
R.R. CROSSING	24 IN.TRANSVERSE LINES FOR IS 6 FT.LETTER 16 IN.LINE FOR "X"	SOLID	WHITE	SEE I.D.O.T.STD.78000I SQ.FT.AREA OF: "R"- 3.6 SQ.FT./ "R" "X"- 54.0 SQ.FT.
SHOULDER DIAGONALS	12 IN.@ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50 FT.C-C (LESS THAN 30 M.P.H.) 75 FT.C-C (30 TO 45 M.P.H.) 150 FT.C-C (OVER 45 M.P.H.) MINIMUM OF 5 DIAGONALS

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO PART III"MARKINGS"IN THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND I.D.O.T.HIGHWAY STANDARD 78000I EFFECTIVE JAN.9,1998.

REVISIONS	DATE
Seperated Railroad Sheet	6/2/2008

LakeCounty Division of Transportation

APPROVED BY: A. KHAWAJA
DATE: APRIL 1, 2007

TYPICAL PAVEMENT MARKINGS FOR COUNTY HIGHWAYS
SHEET 2 OF 2

LC7800

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	SURVEYOR:	/
		/ /		DSGNR/LIAISON:	
		/ /		PLOTTED BY:	1/21/2010

LakeCounty Division of Transportation

LAKE COUNTY STANDARDS & DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CHXX	XXX	XX-XXXXX-XX-XX	XXX	XXX

FILE NAME: $FILE$

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

HDR 30 N LaSalle Street, Suite 3220 Chicago, IL 60602 312-443-4900
HDR Engineering, Inc.

LakeCounty Division of Transportation

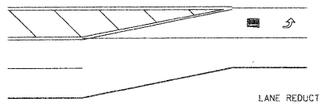
LCDOT DETAILS

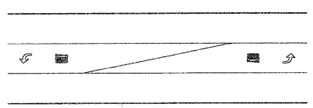
ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	100	107

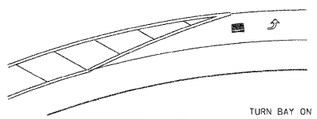
FILE NAME:

TYPICAL PAVEMENT MARKINGS

TYPICAL MINI-SKIP PAVEMENT MARKINGS

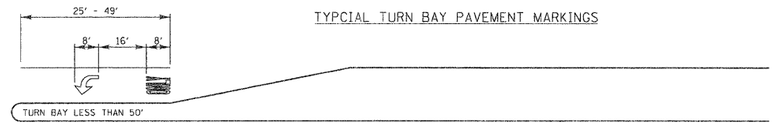


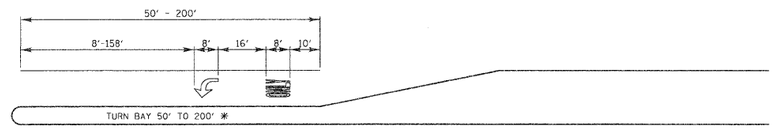


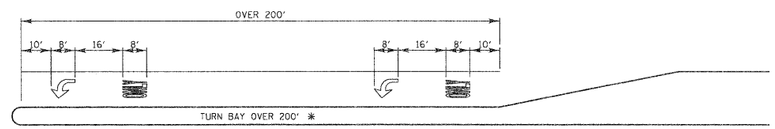


MINI-SKIPS ARE 2 FEET WHITE LINE WITH 6 FEET SPACING. THE MINI-SKIP IS THE SAME WIDTH AS THE PAVEMENT MARKING LINE, IT EXTENDS.

TYPCIAL TURN BAY PAVEMENT MARKINGS







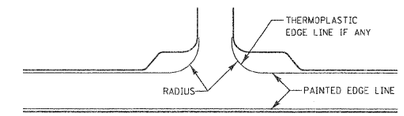
AREA = 15.6 SQ. FT.

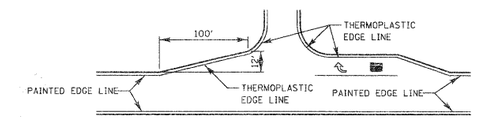
AREA = 20.8 SQ FT.

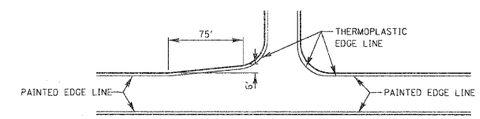
* AT INTERSECTIONS WITH VIDEO DETECTION, THE ARROW AND ONLY PAVEMENT MARKINGS SHALL BE A MINIMUM OF 30' BEHIND THE STOP BAR.

FULL SIZE LETTERS (8') AND ARROWS SHALL BE USED. TURN LANES IN EXCESS OF 400' IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW W/ "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW W/ "ONLY".

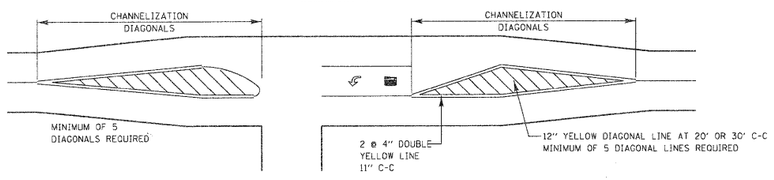
EDGE LINE RADII AT SIDE STREETS



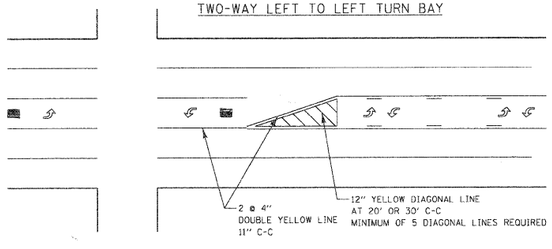




TWO LANE ROAD



TWO-WAY LEFT TO LEFT TURN BAY



TYPICAL DIAGONAL SPACING

DIAGONAL SPACING

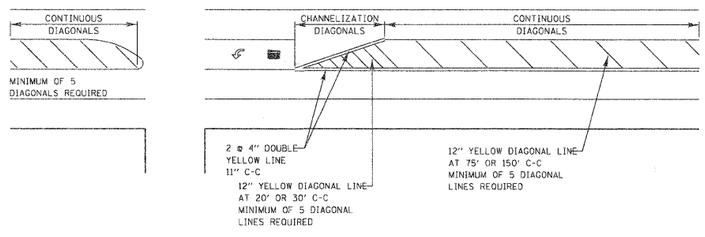
SPEED LIMIT RANGE	CONTINUOUS	INTERSECTION CHANNELIZATION
30-45 MPH	75 FT.	20 FT.
OVER 45 MPH	150 FT.	30 FT.

DUAL LEFT TURN ARROWS

31.2 SQ. FT. MINIMUM
OF 2 SETS REQUIRED

A MINIMUM OF TWO PAIRS OF DUAL LEFT TURN ARROWS SHALL BE USED. THE DUAL LEFT TURN ARROWS SHALL BE WHITE IN COLOR. THE INTERVAL BETWEEN SETS OF DUAL LEFT TURN ARROWS SHOULD BE 200' AND 300'.

3 TO 5 LANE ROAD



REVISIONS	DATE
Seperated Railroad Sheet	6/2/2008

LakeCounty Division of Transportation

APPROVED BY: A. KHAWAJA
DATE: APRIL 1, 2007

TYPICAL PAVEMENT MARKINGS
FOR COUNTY HIGHWAYS
SHEET 1 OF 2

LC7800

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	SURVEYOR:	/
		/ /		DSGNR/LIAISON:	
		/ /		PLOTTED BY:	1/21/2010

FILE NAME: $FILE$

LakeCounty Division of Transportation

LAKE COUNTY STANDARDS & DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CHXX	XXX	XX-XXXXX-XX-XX	XXX	XXX

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

FILE NAME:

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty Division of Transportation

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	101	107

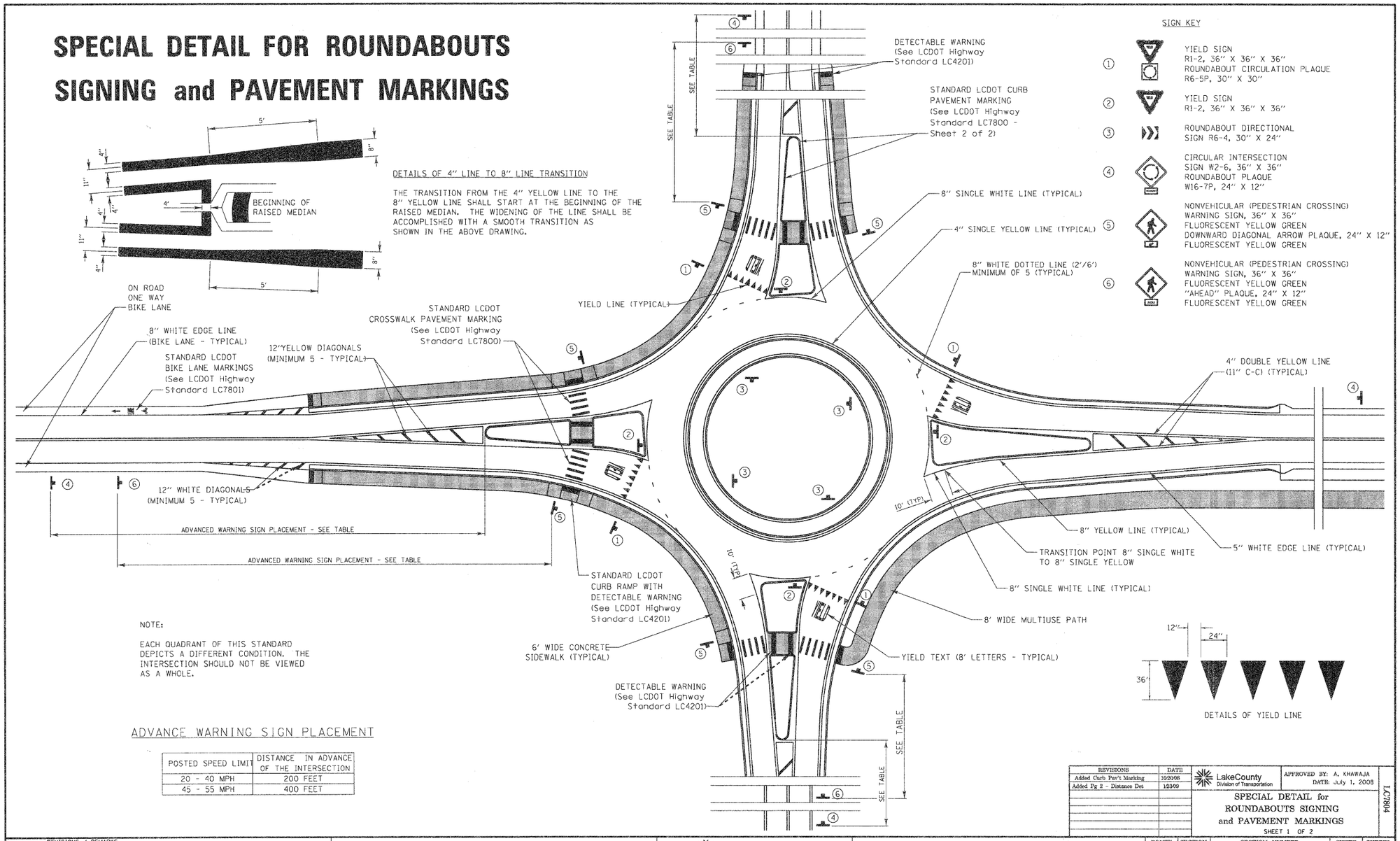
SPECIAL DETAIL FOR ROUNDABOUTS SIGNING and PAVEMENT MARKINGS

DETAILS OF 4" LINE TO 8" LINE TRANSITION

THE TRANSITION FROM THE 4" YELLOW LINE TO THE 8" YELLOW LINE SHALL START AT THE BEGINNING OF THE RAISED MEDIAN. THE WIDENING OF THE LINE SHALL BE ACCOMPLISHED WITH A SMOOTH TRANSITION AS SHOWN IN THE ABOVE DRAWING.

SIGN KEY

1. YIELD SIGN R1-2, 36" X 36" X 36" ROUNDABOUT CIRCULATION PLAQUE R6-5P, 30" X 30"
2. YIELD SIGN R1-2, 36" X 36" X 36"
3. ROUNDABOUT DIRECTIONAL SIGN R6-4, 30" X 24"
4. CIRCULAR INTERSECTION SIGN W2-6, 36" X 36" ROUNDABOUT PLAQUE W16-7P, 24" X 12"
5. NONVEHICULAR (PEDESTRIAN CROSSING) WARNING SIGN, 36" X 36" FLUORESCENT YELLOW GREEN DOWNWARD DIAGONAL ARROW PLAQUE, 24" X 12" FLUORESCENT YELLOW GREEN
6. NONVEHICULAR (PEDESTRIAN CROSSING) WARNING SIGN, 36" X 36" FLUORESCENT YELLOW GREEN "AHEAD" PLAQUE, 24" X 12" FLUORESCENT YELLOW GREEN



NOTE:

EACH QUADRANT OF THIS STANDARD DEPICTS A DIFFERENT CONDITION. THE INTERSECTION SHOULD NOT BE VIEWED AS A WHOLE.

DETAILS OF YIELD LINE

ADVANCE WARNING SIGN PLACEMENT

POSTED SPEED LIMIT	DISTANCE IN ADVANCE OF THE INTERSECTION
20 - 40 MPH	200 FEET
45 - 55 MPH	400 FEET

REVISIONS	DATE
Added Curb Pav't Marking	102098
Added Pg 2 - Distance Det.	1/2999

LakeCounty Division of Transportation

APPROVED BY: A. KHAWAJA
DATE: July 1, 2008

SPECIAL DETAIL for ROUNDABOUTS SIGNING and PAVEMENT MARKINGS
SHEET 1 OF 2

LC7804

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	SURVEYOR:	/
		/ /		DSGNR/LIAISON:	
		/ /		PLOTTED BY:	1/21/2010

FILE NAME: $FILE$

LakeCounty Division of Transportation

TYPICAL SECTIONS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH				

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

FILE NAME:

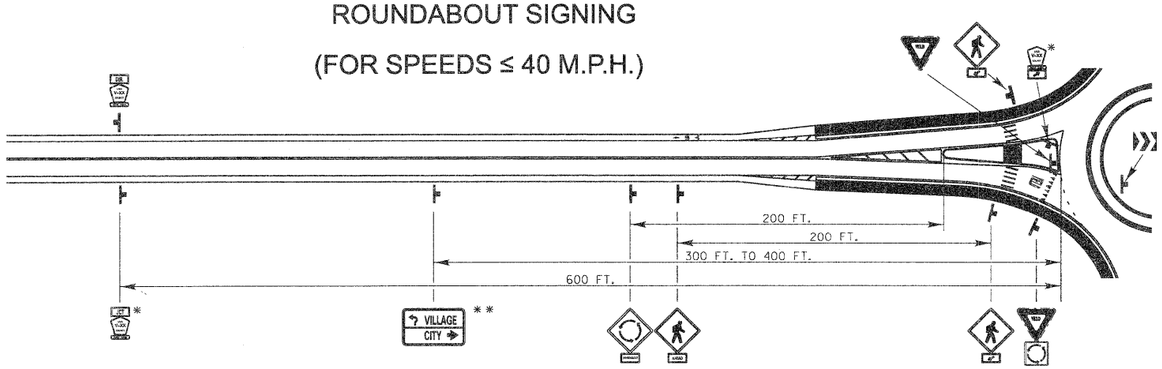
HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty Division of Transportation

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	102	107

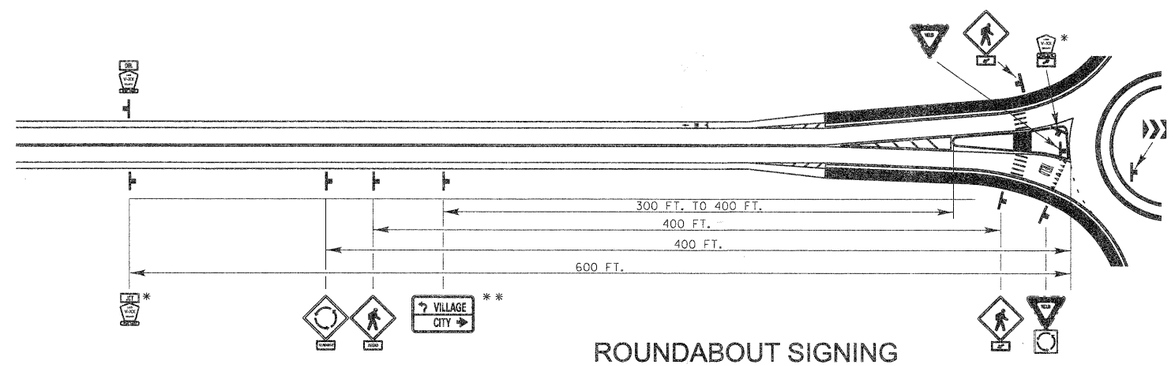
SPECIAL DETAIL FOR ROUNDABOUTS SIGNING and PAVEMENT MARKINGS

ROUNDABOUT SIGNING
(FOR SPEEDS ≤ 40 M.P.H.)



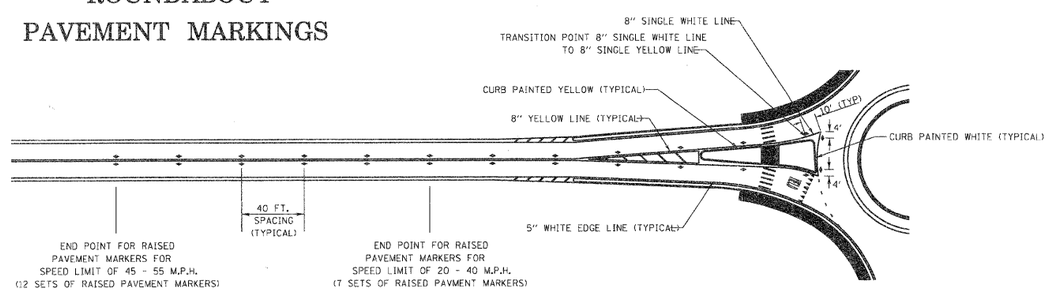
* FOR NON-MARKED ROUTES, USE ADVANCE INTERSECTION NAME SIGN WITH ROUNDABOUT SYMBOL

** OPTIONAL



ROUNDABOUT SIGNING
(FOR SPEEDS ≥ 45 M.P.H.)

ROUNDABOUT PAVEMENT MARKINGS



RAISED PAVEMENT MARKERS
45 - 55 mph = 12 Sets at 40' C-C
20 - 40 mph = 7 Sets at 40' C-C

REVISIONS	DATE
Added Curb Pav't Marking	10/2008
Added Pg 2 - Distance Det	12/09

LakeCounty Division of Transportation

APPROVED BY: A. KHAWAJA
DATE: July 1, 2008

SPECIAL DETAIL for ROUNDABOUTS SIGNING and PAVEMENT MARKINGS
SHEET 2 OF 2

L7/7804

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	SURVEYOR:	/
		/ /		DSGNR/LIAISON:	
		/ /		PLOTTED BY:	1/21/2010

FILE NAME: $FILE$

LakeCounty Division of Transportation

TYPICAL SECTIONS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH				

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

HDR Engineering, Inc.
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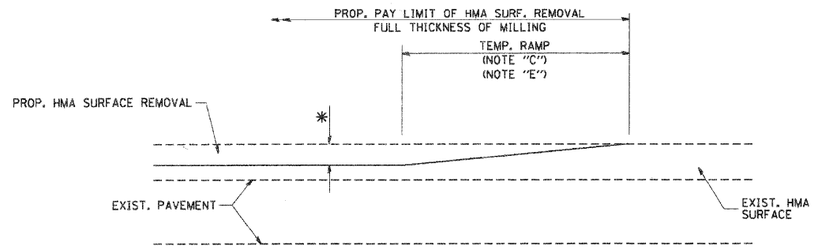
Chicago, IL 60602
312-443-4900

LakeCounty Division of Transportation

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	103	107

FILE NAME:

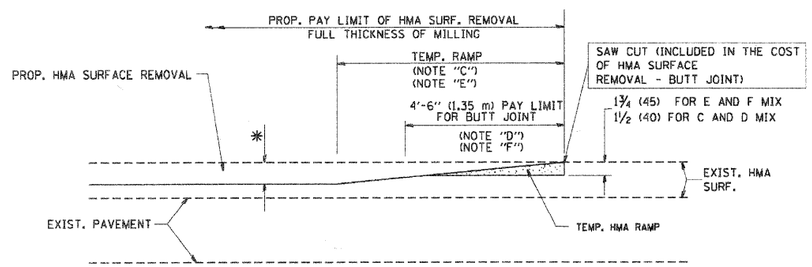
CONTRACT NO.				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

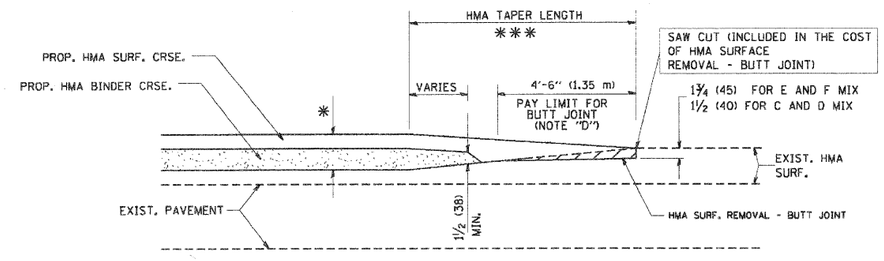


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

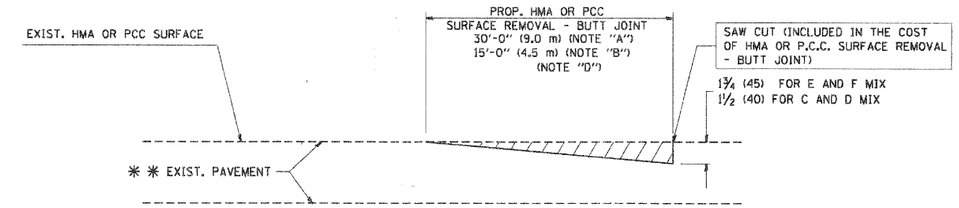
OPTION 2

TYPICAL TEMPORARY RAMP

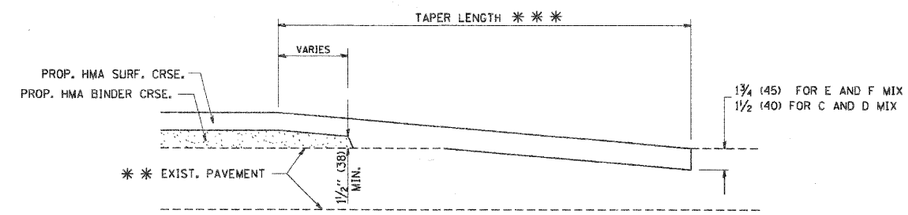


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

✳✳ PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

✳ SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

✳✳✳ 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

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

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

SCALE: VERT. HORIZ. NONE

DRAWN BY

CHECKED BY

BD400-05 (VI=BD32)

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

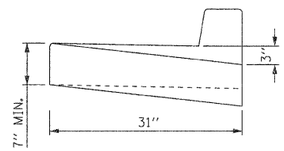
LakeCounty Division of Transportation

DETAILS

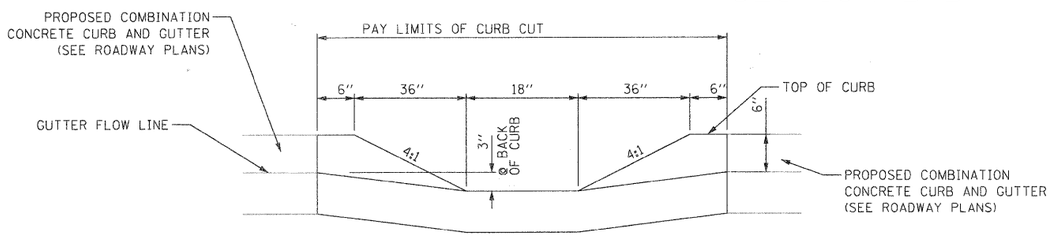
ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	104	107

FILE NAME:

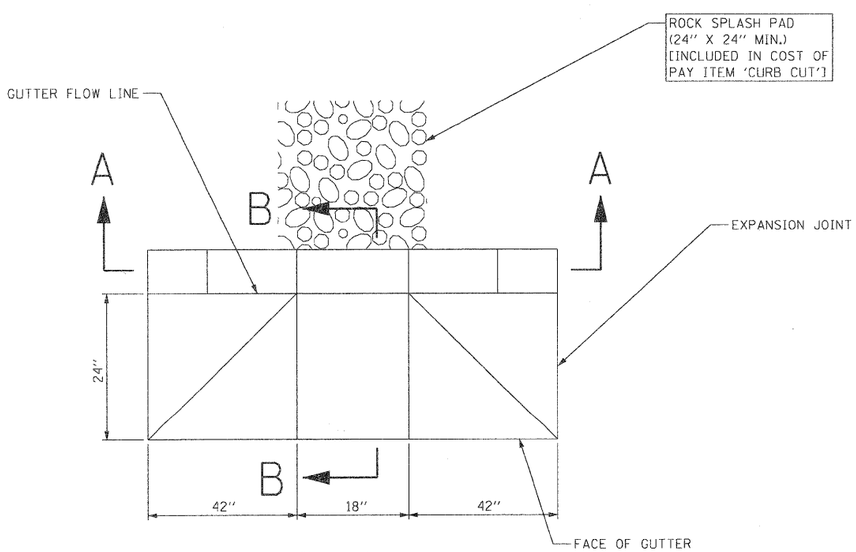
CURB CUT GUTTER TAPER



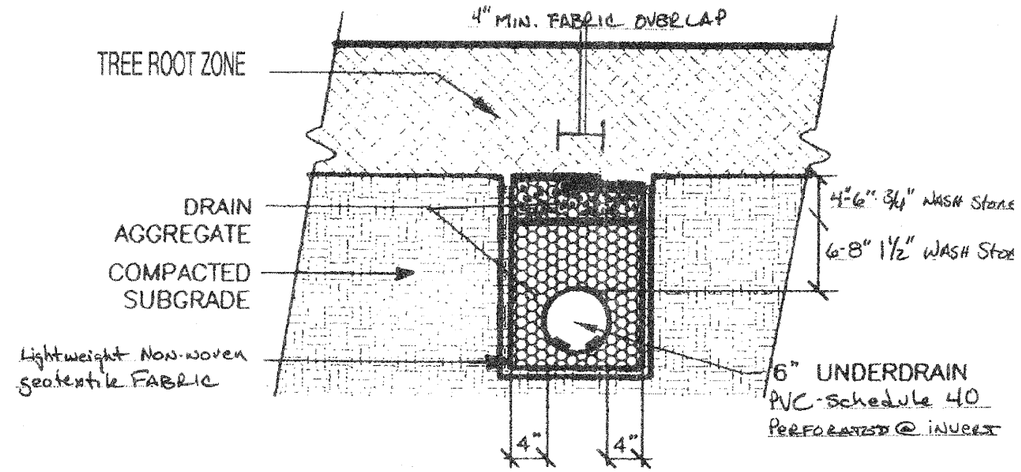
SECTION B-B



SECTION A-A



PLAN

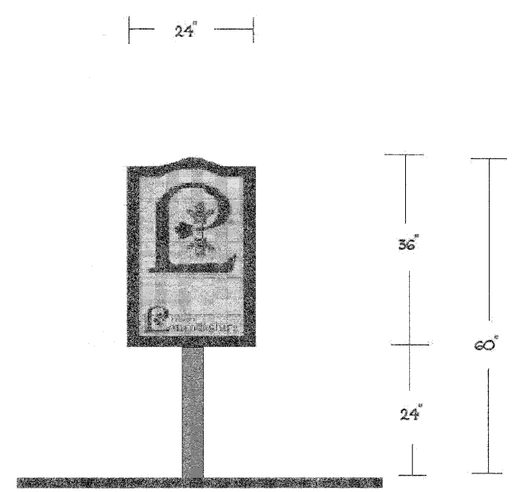


9 UNDERDRAIN

NO SCALE

dbp

MONUMENT SIGN 4' X 4'



1-1/2" thick cedar signboard

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

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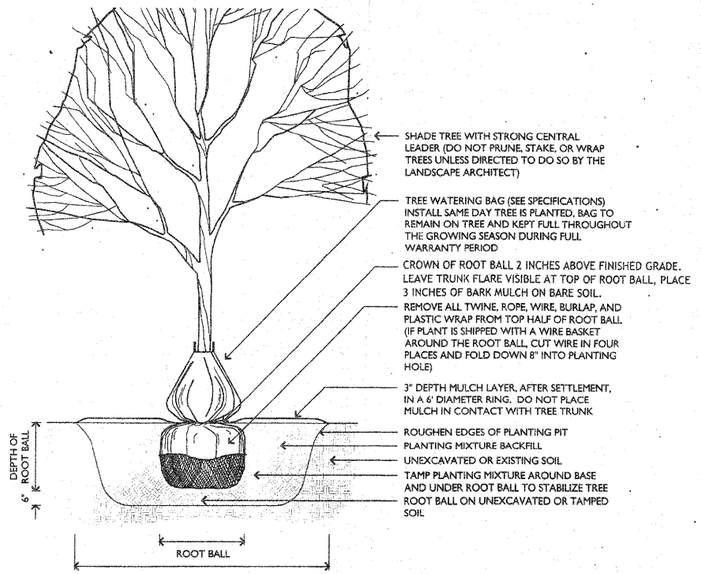
Chicago, IL 60602
312-443-4900

LakeCounty Division of Transportation

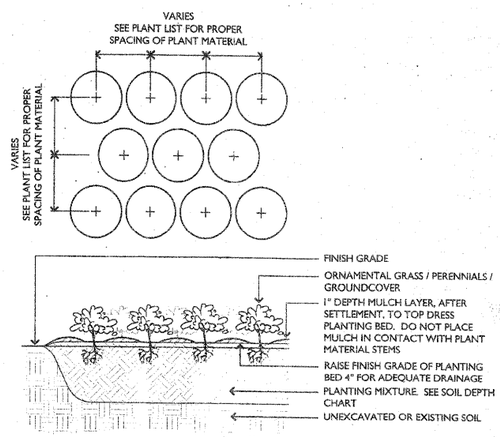
DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	105	107

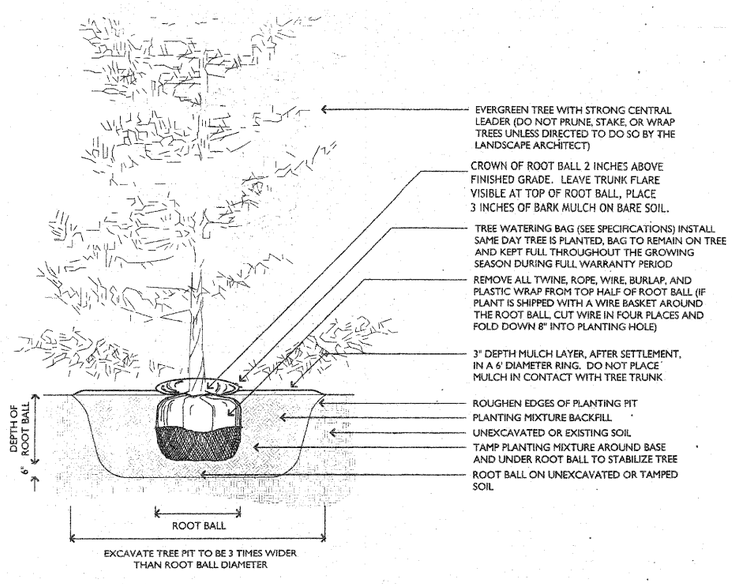
FILE NAME:



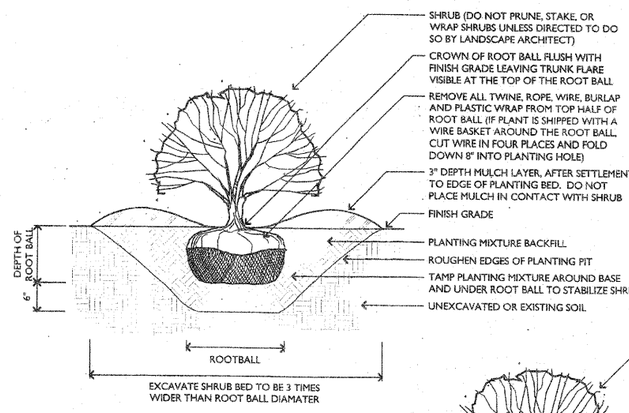
DECIDUOUS TREE INSTALLATION DETAIL
SCALE: 1/2"=1'-0"



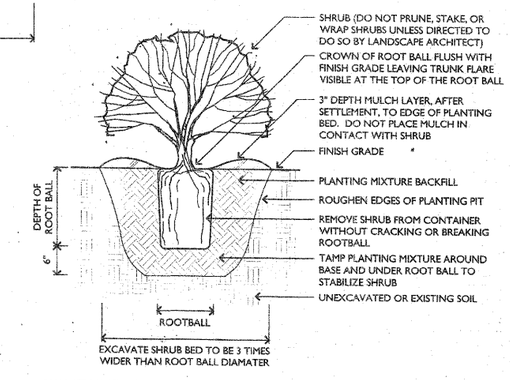
3 ORNAMENTAL GRASS & PERENNIAL DETAIL
SCALE: 1"=1'-0"



2 EVERGREEN TREE INSTALLATION DETAIL
SCALE: 1/2"=1'-0"



4 B&B SHRUB INSTALLATION DETAIL
SCALE: 1"=1'-0"



5 CONTAINER SHRUB INSTALLATION DETAIL
SCALE: 1"=1'-0"

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

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312-443-4900

LakeCounty
Division of Transportation

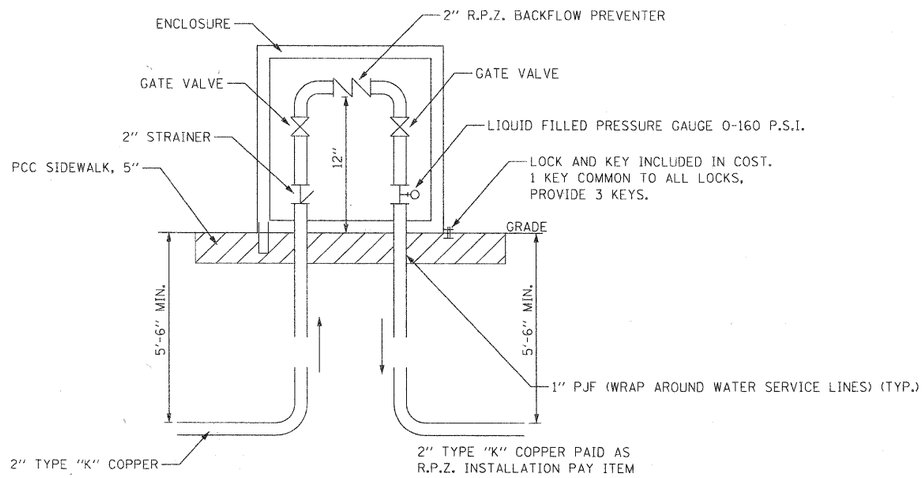
DETAILS

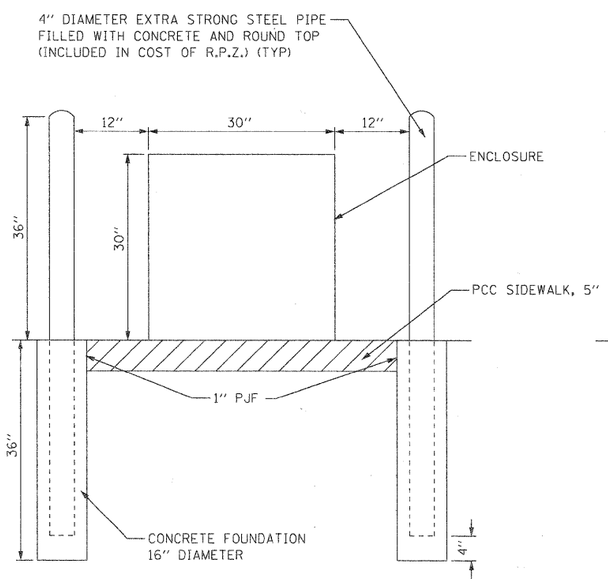
ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	106	107

FILE NAME:

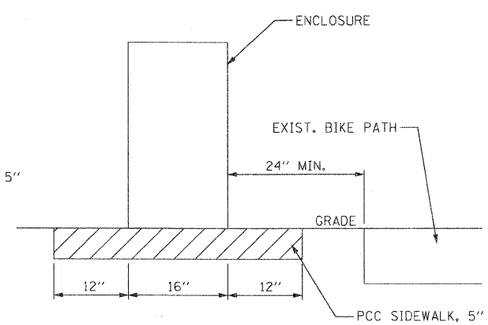
BACKFLOW PREVENTER, ENCLOSURE, AND BOLLARDS

(NOT TO SCALE)





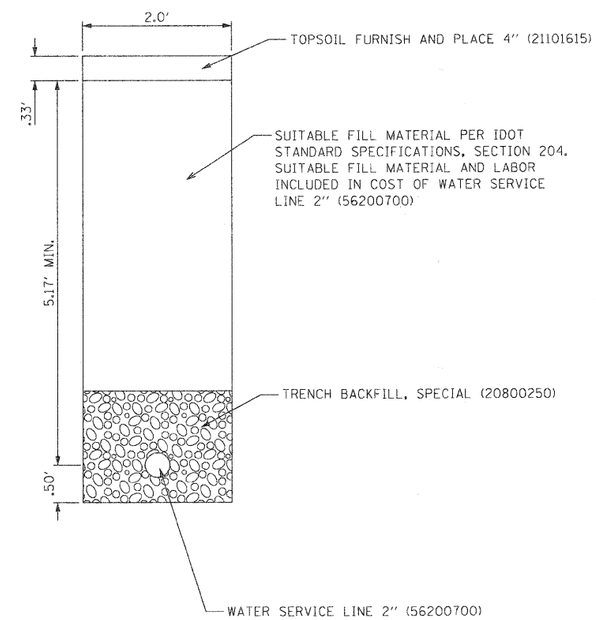
FRONT VIEW



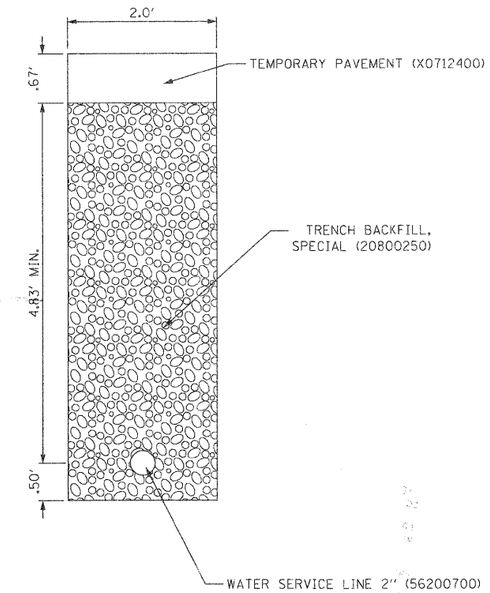
SIDE VIEW

WATER SERVICE LINE CROSS-SECTIONS

(NOT TO SCALE)



WATER SERVICE UNDER PARKWAY



WATER SERVICE UNDER PAVEMENT

63415

REVISIONS / REMARKS					
NO.	DESCRIPTION	DATE	BY	DESIGNED BY:	JRM
		/ /		CHECKED BY:	MPK/JLC
		/ /		DATE:	1/22/2010

HDR Engineering, Inc.
30 N LaSalle Street, Suite 3220
Chicago, IL 60602
312-443-4900

LakeCounty
Division of Transportation

DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH	136	04-00136-06-CH	107	107

FILE NAME: