



\*\* POROUS GRANULAR EMBANKMENT SUBGRADE (PGES) QUANTITY HAS BEEN INCLUDED IN CONTRACT FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSUITABLE OR UNSTABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.03 AND THE UNDERCUT GUIDELINES IN THE IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE MATERIAL IS ENCOUNTERED, THE SOIL SHALL BE REMOVED AND REPLACED WITH PGE OR EMBANKMENT AS DETERMINED BY THE GEOTECHNICAL ENGINEER. IF UNSTABLE AND/OR UNSUITABLE MATERIAL IS NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.

MIXTURE REQUIREMENTS  
THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT

| ITEM   | AC TYPE         | VOIDS         | RAP % |
|--|-----------------|---------------|-------|
| BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70             | PG 64-22        | 4% @ 70 Gyr   | 15%   |
| BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N50             | PG 58-22        | 4% @ 50 Gyr   | 25%   |
| BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70          | PG 64-22        | 4% @ 70 Gyr   | 10%   |
| BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N50          | PG 64-22        | 4% @ 50 Gyr   | 15%   |
| BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50          | PG 64-22        | 4% @ 50 Gyr   | 15%   |
| POLYMERIZED LEVELING BINDER (MACHINE METHOD) SUPERPAVE, IL-4.75, N50 | SBS/SBR PG76-26 | 2.5% @ 50 Gyr | 0%    |
| BITUMINOUS BASE COURSE, SUPERPAVE                                    | PG 58-22        | 2% @ 50 Gyr   | 50%   |
| CLASS D PATCHES, 14 - INCH   | PG 64-22        | 4% @ 70 Gyr   | 15%   |
| INCIDENTAL BITUMINOUS SURFACING, SUPERPAVE                           | PG 64-22        | 4% @ 50 Gyr   | 15%   |

STRUCTURAL DESIGN DATA

| STREET        | STRUCTURAL DESIGN TRAFFIC 2015 |     |     | STREET CLASS | TRAFFIC FACTOR | SSR  | TEMP | STRAIN | AC       | EAC | REQ'D BIT. THICKNESS | MECHANISTIC PAVEMENT DESIGN   |
|---------------|--------------------------------|-----|-----|--------------|----------------|------|------|--------|----------|-----|----------------------|---|
|               | PV                             | SU  | MU  |              |                |      |      |        |          |     |                      |   |
| U.S. ROUTE 52 | 5424                           | 154 | 450 | II           | 3.83           | PODR | 78°F | 69     | PG 58-22 | 500 | 13.5'                | 1 1/2" BIT. CONC. SURF. CRSE., SUPERPAVE, MIX D, N70<br>3/4" POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50<br>1 1/4" BIT. CONC. BINDER CRSE., SUPERPAVE, IL-19, N70<br>12" AGGREGATE SUBGRADE |
| RIVER ROAD    | 3336                           | 70  | 70  | II           | 0.71           | PODR | 78°F | 118    | PG 58-22 | 500 | 9.50'                | 2" BIT. CONC. SURF. CRSE., SUPERPAVE, MIX D, N50<br>7 1/2" BIT. CONC. BINDER CRSE., SUPERPAVE, IL-19, N50<br>12" AGGREGATE SUBGRADE   |

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| CONSULTANTS | REV. NO. | DATE     | DESCRIPTION         |
|-------------|----------|----------|---------------------|
|             | 1        | 12-21-04 | PER I.D.O.T. REVIEW |

\* REFER TO EQUIPMENT MANUFACTURER'S SHOP DRAWINGS

DRAWING FILE: 10665 TYPSEC.DWG PLOTTED BY: UKB 04/JAN/05 11:15

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**VILLAGE OF SHOREWOOD, ILLINOIS**  
**U.S. ROUTE 52 IMPROVEMENTS**

**STRUCTURAL DESIGN DATA AND TYPICAL SECTIONS**

|             |          |             |        |
|-------------|----------|-------------|--------|
| DESIGNED BY | LDH      | SCALE       | NONE   |
| DRAWN BY    | DEK      | PROJECT NO. | 010665 |
| CHECKED BY  | LDH      | SHEET NO.   |        |
| DATE        | 10-05-04 |             |        |

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