COUNTY OF ST. JOSEPH, INDIANA
BOARD OF COMMISSIONERS
DEPARTMENT OF PUBLIC WORKS
COUNTY SPECIFICATIONS FOR PUBLIC WORKS

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1987 BOARD OF COUNTY COMMISSIONERS

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MARCH 3RD, 1987
DATED

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Section I

PREVAILING SPECIFICATIONS FOR PUBLIC WORKS

The PREVAILING SPECIFICATIONS of the County of St. Joseph, Indiana shall consist of a combination of the following:

A. The Standard Specifications of the Indiana Department of Transportation, 1985 Edition and any Supplemental Specifications thereto, issued by the Indiana Department of Transportation, hereinafter referred to as "STATE SPECIFICATIONS", except as modified in paragraph below.

B. The County Supplemental Specifications, latest edition, including revisions, as issued by the St. Joseph County Board of Commissioner. The County Supplemental Specifications include additions to and modifications of the State Specifications plus all Supplemental Specifications, and hereinafter referred to as County Specifications".

It is required that an Agency or Individual that engages in public works within the corporate limits of St. Joseph County, excluding municipally incorporated areas, shall abide by these COUNTY SPECIFICATIONS. copies of the State Specifications must be procured from:

Indiana Department of Transportation
Contract Engineer
Room 1313 State Office Building
100 No. Senate Avenue
Indianapolis, in 46204

C. The DESIGN AND CONSTRUCTION STANDARDS of the County of St. Joseph are hereby made a part of these PREVAILING SPECIFICATIONS. These STANDARDS will be issued by the Department of Public Works for the use in the design and construction of Public Works. The Department of Public Works reserves the right to add to, delete from, or amend these STANDARDS upon approval of the St. Joseph County Board of Commissioners.
SECTION II

COUNTY SUPPLEMENTAL SPECIFICATIONS

The State Specifications shall be adopted as part of the COUNTY SPECIFICATIONS with the following modifications:

SECTION 101 - DEFINITIONS AND TERMS

101.15 - Delete and add the following:

Contractor - The individual, firm, corporation, private party, or combination of same contracting with the St. Joseph County Board of Commissioners for performance of prescribed work.

101.16.1 - Delete and substitute the following:

Department - The St. Joseph County Board of Commissioners as constituted under the laws of Indiana for the administration of public works.

101.16.2 - Delete and substitute the following:

Director - The President of the Board of County Commissioners, St. Joseph County, Indiana

101.17 - Delete and substitute the following:

Engineer - The County Engineer, duly appointed by the St. Joseph County Board of Commissioners, acting directly through his duly authorized representatives.

101.34 - Delete. See Section 103 and 104 below.

101.48 - Delete and substitute the following:

State - The County of St. Joseph, Indiana acting through its authorized representative.

101.68 - Add the following:

Auditor - The Auditor of the County of St. Joseph, Indiana
SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS

This entire section is to be deleted and the following section substituted:

102.01 CONTENTS OF PROPOSAL FORMS

Upon request, the Department will furnish the prospective bidder with a Proposal at the Auditor's office, County/City Building, South Bend, Indiana, 46601. The prospective bidder will be required to pay the Department the sum stated in the Notice to Bidders for each Proposal.

Each Proposal will include the following:

1. A Form 96 [Revised in 1964], GENERAL BID FOR PUBLIC WORK, prescribed by the State Board of Account. This form includes the proposal, non-colusive affidavit and non-discriminatory contract.
2. Itemized bid form showing approximate quantities of work.
4. Project drawings.
5. Prevailing Wage Scale.

102.01(a) AFFIRMATIVE ACTION REQUIREMENTS TO INSURE EQUAL EMPLOYMENT OPPORTUNITY

PART I

A. Coverage: The provisions of this Section shall be applicable to all bidders, contractors and subcontractors.

B. Requirements - Affirmative Action Plan: The bidders, contractors and subcontractors will not be eligible for award of a contract under this Notice to Bidders, unless such bidder has submitted as part of its bid, and has had approval by the Compliance Officer, a written affirmative action plan, embodying both [1] goals and timetables of minority manpower utilization, and [2] specific affirmative action steps directed at increasing minority manpower utilization by means of applying good faith efforts.
to carrying out such steps or is demanded to have submitted such a program. Both
the goals and timetables, and the affirmative action steps must meet these require-
ments, which are on file at the Department of Public Works, for all trades utilized
on the project, whether subcontracted or not.

PART II: Materiality and Responsiveness: Any equal employment opportunity submission re-
quired to be made by the prospective contractor pursuant to these Bid Conditions
which is material and which will govern the contractor's performance on the project
shall be made a part of this bid. Failure to submit an Affirmative Action Plan as
applicable, will render the bid non-responsive.

PART III: Compliance and Enforcement: Contractors are responsible for informing their sub-
contractors, regardless of tier, as to their respective obligations hereof [as
applicable]. Bidders, contractors and subcontractors hereby agree to refrain from
entering into any contract or contract modification subject to Executive Order 11246
of September 24, 1965, with a contractor debarred from, or who is determined not
to be a "responsive" bidder for, Government contracts and Federally assisted
construction pursuant to the Executive Order. The bidder, contractor or
subcontractor shall carry out such sanctions and penalties for violation of the equal
opportunity clause including suspension, termination and cancellation of existing
subcontractors as may be imposed or ordered by the administering agency, the
compliance agency or the Office of Federal Contract Compliance pursuant to the
Executive Order. Any bidder, contractor or subcontractor who shall fail to carry
out such sanctions and penalties shall be deemed to be in non-compliance with
these Bid contents and Executive Order 11246.

Nothing herein is intended to relieve any contractor or subcontractor during the
term of its contractor on this project from compliance with Executive Order 11246
[as amended] and the Equal Employment Opportunity Clause of its contract with
respect to matters not covered to these Bid Conditions.

[5]
Violation of any substantial requirements by a contractor or subcontractor coerced by these Bid Conditions, including the failure of such contractor or subcontractor to make a good faith effort to meet the terms of the Affirmative Action Plan by a contractor or subcontractor shall be deemed to be non-compliance by such contractor or subcontractor with the Equal Opportunity Clause of the contractor, and shall be grounds for impositions of the sanctions and penalties provided at Section 209(a) of Executive Order 11246.

Each agency shall review its contractors’ and subcontractor’s employment practices during the performance of the contract. If the agency determines that the Affirmative Action Plan no longer represents effective equal employment opportunity, it shall so notify the Office of Federal Contract Compliance which shall be solely responsible for any final determination of that question and the consequences thereof.

If the contractor or subcontractor meets its goals or if the contractor or subcontractor can demonstrate that it has made every good faith effort to meet those goals, the contractor shall be presumed to be in compliance with Executive Order 11246, the implementing regulations and its obligations under these Bid conditions and no form, sanctions or proceedings leading toward sanctions shall be instituted unless the agency determines that the contractor or subcontractor is not providing equal employment opportunities. In judging whether a contractor or subcontractor has met its goals, the agency will consider each contractor’s or subcontractor’s minority manpower utilization and will not take into consideration the minority manpower utilization of its subcontractor. If the subcontractor has failed to comply with the requirements of Executive Order 11246 [as amended], the implementing regulations and its obligations under these Bid Conditions, the agency shall take such action and impose such sanctions as may be appropriate under the Executive Order and the regulations. When the agency proceeds with such formal actions, it has the burden of proving that the contractor has not met the requirements of these Bid Conditions, but the contractor’s
failure to meet his goals shall shift to him the requirement to come forward with evidence to show that he has met this "good faith" requirements of these Bid Conditions by instituting at least the Specific Affirmative Action steps listed above and aby making every good faith effort to make those steps work toward the attainment to its goals within its timetables. The pendency of such formal proceedings shall be taken into consideration by Federal agencies in determining whether such contractor or subcontractor can comply with the requirements of Executive Order 11246 and is, therefore, a "responsible prospective contractor" within the meaning of the Federal Procurement Regulations.

It shall be no excuse that the union, with which the contractor has a collective bargaining agreement, providing for exclusive referral, failed to refer minority employees.

The procedures set forth in these conditions shall not apply to any contractor when the head of the contracting or administering agency determines that such contract is essential to the National security and that its award without following such procedures is necessary to the National security. Upon making such a determination, the agency head will notify, in writing, the Director of the Office of Federal Contract Compliance within thirty [30] days.

Requests for exemptions from these Bid Conditions must be made in writing, with justifications, to the Director, Office of Federal Contract Compliance, U. S. Department of Labor, Washington, D. C. 20210, and shall be forwarded through and with the endorsement of the agency head.

Contractors and subcontractors must keep such records, and file such reports relating to the provisions of these Bid conditions as shall be required by the contracting or administering agency or the Office of Federal Contract Compliance.
102.02 BID GUARANTEE

The proposal must be accompanied by a Bid Guarantee to insure the execution of the Contract. This Guarantee shall be in the form of a Certified Check or a Bid Bond in the amount of ten percent [10%] of the Bid. The Guarantee shall be made out to "St Joseph County, Indiana". The County will return the Bid Guarantee(s) to the unsuccessful bidder(s) as soon as practicable after the low bidder will be returned after the execution of the Contract Documents.

102.03 COMPETANCE OF BIDDERS

The "Standard Questionnaire and Financial Statement" for Bidders [form 96A Revised 1949] prescribed by the State Board of Accounts of Indiana, must be completely filled out, attested and submitted with each proposal to the St. Joseph County Board of Commissioners, in accordance with Chapter 306, Page 1248, Acts of 1947, State of Indiana, for public construction that will be five thousand dollars, [$5,000.00] or more, unless bidder has on file with the Engineer a form 96A for the current calendar year.

If the information submitted by any Bidder on the form herein prescribed is found on examination to be unsatisfactory, the bid submitted by that bidder will not be considered.

The Department, at its discretion, may require the bidders to submit proof of their prequalification with the Indiana Department of Highways along with their submission of bids.

102.04 INTERPRETATION OF QUANTITIES

The quantities appearing in the itemized proposal are approximate only and are prepared for the comparison of bids. Payment to the contractor will be made only for the actual quantities of work performed and accepted, or materials furnished in accordance with the contract. The scheduled quantities of work

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to be done and materials to be furnished may each be increased, decreased, or omitted as hereinafter provided, thru the issuance of Change Orders by the Engineer.

102.05 EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS AND SITE OF WORK

The department will prepare full, complete, and accurate plans and specifications giving such directions as will enable any competent mechanic or contractor to carry them out. The bidder is expected to examine carefully the site of the proposed work, the proposal, plans, specifications, supplemental specifications, special provisions, and contract forms before submitting a proposal. The submission of a bid shall be considered prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the plans, specifications, supplemental specifications, special provisions, and contract.

Information pertaining to exploration, borings, test pits, and other preliminary investigations may appear on the plans. While such data will have been collected with reasonable care, there is no expressed or implied guaranty that conditions so indicated are entirely representative of those actually existing, or that unlooked for developments may not occur. These investigations will have been made only for the information of the Engineer and to assist in the preparation of the design. The County assumes no responsibility for the correctness of the information nor for the actual subsoil or other conditions which may be found to exist during the progress of construction. The bidder shall put his own interpretation on results of such investigations and satisfy himself as to materials to be excavated and soil through which piles may be driven.

102.06 PREPARATION OF PROPOSAL

The bidder shall submit his bid proposal on the forms furnished by the Department.
Each proposal shall consist of the following:

1. Form 96, **completely filled in** and showing the gross amount of the bid.
2. Itemized bid, completely filled in, showing the bidder's price for each unit of work and the gross amount of the bid. The itemized proposal shall be stapled to the Form 96 for submission to the Department. The bidder is cautioned to check all multiplication of unit prices and the addition of extensions, since the award can be based on the corrected Gross Amount of Bid.

3. Bid Guarantee. [See Section 102.02]

4. Form 96A, when required. [See Section 102.03] The bidder is cautioned to add no qualifying statements or offers of extra work or materials to his proposal unless specifically requested to do so in the Special Provisions. Violation of this requirement can be cause for rejection of his proposal.

102.09 **DELIVERY OF PROPOSAL**

Each Proposal shall be submitted in a sealed envelope [minimum size 12" x 15"] on which is written "Proposal for the improvement of [———]" and shall bear the name and address of the Bidder. If not delivered personally, the above mentioned sealed envelope may be mailed, but shall be enclosed in another envelope which is addressed to the St. Joseph County Commissioners, County/City Building, South Bend, Indiana 46601 and forwarded, preferably, by certified mail.

All proposals shall be received prior to the time specified in the "Notice to Bidders" Proposals received after the time for opening of bids will be returned to the bidder unopened.
102.12 PUBLIC OPENING OF PROPOSALS

Proposals will be opened and read publicly on the date at the time specified in the Notice to Bidders. The Department reserves the right to waive irregularities in the received and to move the place of opening and reading of bids to a public place other than as designated in the Notice to Bidders after the closing time for bids to be received.

102.15 WAGE STIPULATION

The successful bidder must comply with the determination of the prevailing scale of wages made in connection with this project in accordance with Chapter 319 of the Acts of 1935, State of Indiana. The prevailing wage scales as fixed and determined for this project for the several classifications of labor may be examined at the Engineer's office.

SECTION 103 - AWARD AND EXECUTION OF CONTRACT

This entire section is to be deleted and the following Section substituted:

103.01 CONSIDERATION OF PROPOSALS

After the proposals are opened and read, they will be compared on the basis of the summation of the products of the approximate quantities shown in the bid schedule by the unit bid prices. The results of such comparisons will be immediately available to the public. In the event of a discrepancy between unit bid prices and extensions, the unit bid price shall govern.

The right is reserved to reject any or all proposals, to waive technicalities, or to advertise for new proposals, if in the judgement of the awarding authority the best interests of the County will be promoted thereby.

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103.02 - AWARD OF CONTRACT

The award of contract, if it be awarded, will be made, within the time stipulated in The Special Provisions, after the opening of bid proposals, to the lowest responsible and qualified bidder whose proposal complies with all the requirements prescribed, and provided the sum is not significantly greater than the Engineer's Estimate. If the contract is not awarded within sixty [60] days, the award may be delayed as agreed by mutual consent of the Department and the bidder.

103.03 - BID BOND, PROPOSAL AND CONTRACT BOND

The successful bidder shall furnish within ten [10] days after the award a Performance, Labor and Material Bond in a penal sum of at least one hundred [100%] percent of the total amount payable by the terms of the Contract. Such Performance Bond shall be on the Bond Form which is included in the Contract documents.

If specifically required in the Special Provisions, the successful bidder shall also furnish a Maintenance Bond or a Maintenance Agreement. The Bond shall be in the sum of ten [10%] percent of the total amount payable in the terms of the Contract Documents.

The Maintenance Bond or Agreement shall be in effect for a period of no less than twelve [12] months from the date of the execution and approval of the Project Completion Affidavit.
103.04 INSURANCE

OWNERS AND CONTRACTORS PROTECTIVE LIABILITY INSURANCE

The contractor shall, prior to contract award, furnish the County with a policy providing Owners' and Contractor's Protective Liability Insurance-Coverage for Operations of the contractor. The County may accept an insurance binder, temporarily, pending receipt of the policy. The insurer shall be a company holding a certificate of authority issued by the Indiana State Insurance Commissioner to do business in the state. The named insured shall be St. Joseph County, Indiana, and the limits of coverage shall be in the amounts set out herein:

1. A limit of not less than $1,000,000.00 for all damages arising of bodily injury or death in any one occurrence.

2. A limit of not less than $300,000.00 for all damages arising out of injury to or destruction of property in any one occurrence and an aggregate limit of not less than $900,000.00 for all damages arising out of injury to or destruction of property during the policy period.

In addition to the limits specified herein, the policy shall also include the following endorsement to the "Owners' and Contractors' Protective Liability Insurance":

3. Whenever used in this policy, the term "named insured" shall include the St. Joseph Government, its members and employees.

4. Whenever used in this policy, the term "general supervision" shall include on-site inspection, field engineering, field testing, and activities incidental thereto.

Proof of renewal shall be furnished fifteen [15] days prior to the expiration of the policy and, if subject to cancellation, the policy shall provide for written notice from the insurance company to the St. Joseph County Board of Commissioners at least fifteen [15] days prior to the effective date of the cancellation. In the event of cancellation or expiration, all work on the contract shall be suspended except that necessary for traffic maintenance and the protection of life and property. No extension in the contract completion time will be allowed on account of this feature and work day charges will continue.

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The Contractor shall indemnify, defend, exculpate, and hold harmless St. Joseph County, Indiana, its officials and employees from any liability due to loss, damage, injuries, or other casualties of whatsoever kind, or by whomsoever caused, to the person or property of anyone on or off the right-of-way arising out of or resulting from the performance of the contract or from the installation, existence, use, maintenance, conditions, repairs, alteration, or removal of any equipment or materials, whether due in whole or in part to the negligent acts or omissions of the County, its officials, agents, or employees; or the Contractor, his agents or employees, or other persons engaged in the performance of the contract; or the joint negligence of any of them, including any claim arising out of the Workmen's Compensation Act or any other law, ordinance, order, or decree. The Contractor also agrees to pay all expenses and attorneys' fees incurred by or imposed on the County in connection herewith in the event that the Contractor shall default under the provisions of this paragraph. As much of the money due the Contractor under and by virtue of his contract as the County may consider necessary for such purpose, may be retained for the use of the County. In case no money is due, the Contractors' surety may be held until such suit or suits, action or actions, claim or claims for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the County. Money due will not be withheld when the Contractor produces satisfactory evidence that he is protected adequately by public liability and property damage insurance. The obligation of the Contractor under this paragraph shall not extend to the indemnification or exculpation against claims arising out of the preparation or approval of plans, specifications, or special provisions unless furnished by the Contractor.

It is specifically agreed between the parties executing the contract that it is not intended by any of the provisions of any part of the contract to create the public or any member thereof a third party beneficiary hereunder, or to authorize anyone not a party to the contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the contract.
CONTRACTOR'S AND SUBCONTRACTOR'S COMPREHENSIVE GENERAL LIABILITY

With respect to all operations he performs and for the duration of the contract, the Contractor and Subcontractor shall carry Contractor's Comprehensive General Liability Insurance providing for a limit or not less than $500,000.00 for all damages arising out of bodily injury or death in any one occurrence. The policy shall also provide for a limit of not less than $100,000.00 for all damages arising out of injury to or destruction of property in any one occurrence and, subject to that limit per occurrence, and aggregate limit of not less than $300,000.00 for all damages arising out of injury to or destruction of property during the policy period. Such insurance shall include coverage for Premises-Operations, Contractor's Protective Liability, Products-Complete Operations, and Blanket Contractural Liability.

COMPREHENSIVE AUTOMOBILE LIABILITY

The Contractor and Subcontractor shall carry for the duration of the contract Comprehensive automobile Liability Insurance providing for a limit of not less than $500,000.00 for all damages arising out of bodily injury or death for each person and a limit of not less than $500,000.00 for all damages arising out of bodily injury or death in any one occurrence. The policy shall also provide limit of not less than a $100,000.00 for all damages arising out of injury to or destruction of property in any one occurrence. Such insurance shall include coverage for all owned, non-owned, and hired vehicles.

WORKMAN'S COMPENSATION INSURANCE

The Contractor and subcontractor shall also show proof of a current Workmans Compensation Insurance policy prior to contract awards.
103.05 EXECUTION AND APPROVAL OF CONTRACT

At the time the contract is ready for final execution, all of the necessary right-of-way may not have been secured. In order to expedite prompt execution of the contract, the Contractor may sign a waiver of damages. This will waive any and all damages that might accrue to him for delay, expenses, inconvenience, loss of profits, or for any other cause occasioned to him by the failure of the Department to secure such right-of-way. The waiver shall be binding upon any subcontractor of the principal Contractor.
SECTION 105 - CONTROL OF WORK

105.04 COORDINATION OF PLANS, SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND SPECIAL PROVISIONS  Delete the first paragraph and add:

The Order of Precedence of all Project documents shall be:

I  Itemized Proposal
II  Special Provisions
III  Plans
IV  Standard Drawing
V  County Supplemental Specifications
VI  State Specifications

Each of the above documents are essential parts of the contract and a requirement occurring in all. They are intended to be complimentary and to describe and provide for a complete project. In case of discrepancy, calculated dimensions will govern over scaled dimension. The precedence outlined herein shall not absolve the Contractor of his responsibility as provided in 107.14.

Add the following sections:

105.18 ESTABLISHMENT OF LINES AND GRADES

The Department of Public Works shall be responsible only for the establishment of horizontal and vertical controls, for the establishment of horizontal and vertical controls, alleys, sidewalks, driveways, sewers, water and other underground utilities.

105.19 APPROVAL OF PLANS

1. Whenever new construction effects public right-of-way for grades, drainage or traffic control the plans must be approved by the Engineer prior to issuance of a Permit.

2. This approval is based on existing County ordinances and Federal transportation requirements for the South Bend Urban Area.

3. Prior to the start of the design for any facility listed in paragraph (1) above, the Architect, Engineer or Owner should contact the Department of Public Works for information.
105.20   VERTICAL SURVEY DATUM

1. All plans submitted to the Department of Public Works for approval must be on the United States Coast and Geodetic Survey datum.

2. At no time will assumed datum be allowed.

SECTION 106   CONTROL OF MATERIAL

Add the following section:

106.10   COARSE AGGREGATE: The following types of aggregates shall be used:

- Type B Surface Asphalt: Blast Furnace Slag
- Base Asphalt: B. F. Slag, Limestone or Gravel
- Class A Concrete: B. F. Slag or Limestone
- Class B Concrete: B. F. Slag, Limestone or Gravel

106.11   MATERIAL CERTIFICATIONS: All material that is to be used in any construction that has not been manufactured by the Contractor shall be approved prior to its use. Approval by the Engineer, in writing, will be given after certified reports as to the materials' composition and compliance with these STANDARD SPECIFICATIONS has been supplied to the Engineer. These certifications will be required prior to incorporation of any manufactured product into the Project. Aggregate shall be tested and approved by the Engineer prior to its incorporation into base, subbase, asphalt, cement concrete or shoulder work.
SECTION 109 - MEASUREMENT AND PAYMENT

109.07 - Delete and substitute the following:

109.07 - FINAL PAYMENT

When the Contractor has completed the work in an acceptable manner in accordance with the terms of the Contract, the Engineer will prepare a Final Estimate including Final Change Order, if required, for the work done, one copy of the Completion Affidavit and the necessary payment claims and deliver them to the Contractor. Upon execution of the affidavits and claim forms and delivery to the Engineer by the Contractor the Engineer will present them to the Department for final payment. A copy of the fully executed affidavit will be returned to the Contractor after approval and acceptance by the Board of County Commissioners.
SECTION 303 - COMPACTED AGGREGATE, BASE, SURFACE OR SHOULDERS

303.02 MATERIALS
Add the following to the 5th Line:
For Compacted Aggregate Base, No. 53 or No. 72 903.01

303.09 COMPACTING AGGREGATE
Delete all reference to 3 wheel or tandem rollers.

SECTION 304 - SUBBASE

304.02 MATERIALS
Add the following:

304.02(b) The natural soil in place may qualify as SUBBASE when the following conditions are met:

Borings: A soil boring at intervals not to exceed 200 linear feet is taken within the limits of construction. The boring shall extend 3 feet below the proposed finished grade, or 3 feet below the natural ground.

Gradation The soil sample shall be screened for compliance with one of the gradations tabulated in 903.02(a). For the determination of the material passing the Size No. 200 Sieve, the sample shall be thoroughly washed and the amount of Loss Through Decantation shall be determined. The final gradation of the material shall comply with the requirements as set forth in 904.02(a).

Analysis The analysis of the existing material shall be submitted to the Engineer over the signature seal of a Registered Professional Engineer. The final determination for use of the material as SUBBASE shall be made by the Engineer.
SECTION 310 - CHEMICAL TREATED BASE AND SUBBASE

310.01 DESCRIPTION This work shall consist of the breaking, scarification, addition of chemicals, mixing, compacting and final finishing of existing bituminous and aggregate surfaces, bases and subbases, in accordance with these specifications and conforming to the lines, grades, thickness, and typical cross section shown on the plans or as otherwise specified or directed.

310.02 BREAKING AND SCARIFICATION The existing roadway, within limits designated shall be broken and scarified to the depth shown. The non-granular scarified material shall be pulverized so that it will pass a two inch [2"] sieve.

310.02(a) When the Contract contains an item for SUBBASE PROCESSING the existing scarified roadway material shall be removed to the depth specified from the area to the treated for SUBBASE. The SUBBASE shall then be treated, compacted and finished in accordance with subsequent specifications.

310.03 ADDITION OF CHEMICAL: After through breaking and scarification the chemical and water shall be added and completely mixed with the material.

Additional chemical and water shall be added until the material has been thoroughly mixed and pulverized.

Close attention shall be given to this operation so that the Manufacturer’s instructions are exactly followed. If in the opinion of the Engineer additional mixing, chemical, or water is needed the Contractor is to comply. Care shall be taken so that the mixture does not become over wet.

310.04 CHEMICAL

310.94(a) BASE AND GRANULAR MATERIALS This material must be a chemical agent which, when added to water and applied to a base or granular soil, is capable of effecting a reduction of the organic contents of the base or granular soil through accelerated reduction-oxidation processes, thus increasing compactability, general stability, and the internal drainage characteristics. In addition, it must contribute those elements that will further improve these characteristics in clay or silts that may be present in granular materials abut in which they do not predominate.
It must be capable of improving the characteristics of granular materials, in which clays and silts exist but in which they do not predominate, as follows:

1. A reduction in the amount of moisture present in the field must be evident following periods of saturation.
2. An increase in the amount of moisture present in the field must be evident after periods of dehydration.
3. An increase in the density and general stability must be evident in these materials.

When added to bases containing asphalt or tar fragments, it must, when used in recommended dilutions and in accordance with recommended procedures, disperse such asphalt and tar residues so that they may be re-used as aggregate and bonding material. It must also thoroughly and completely disperse newly applied asphalts into such materials.

It must not leave injurious chemical residues and must not damage plant life.

It must be completely water soluble and must disperse readily when subjected to moderate agitation. When introduced into water, it must not leave an oil film on the surface nor may it form tarry, asphaltic or polysulphide residues.

The PH of this material when diluted 1 part to 1,000 parts of water should not be less than 1.8 nor greater than 1.9.

The manufacturer of the chemical must provide with the bid, complete instructions for use in all types of base and subbase materials.

310.04(b) **CLAYS AND DENSE GRADED BASED**

A two component chemical stabilizing method for clays and dense graded bases containing excessive amounts of clay that will improve moisture equilibrium characteristics and, when used in sufficient quantities, increase the bearing values of clays when moisture contents are near the plastic limit. The PH of the material finished for clays not containing bentonite or montmorillonite clays shall not be less than 1.45 nor more than 1.55 when diluted 1 part chemical to 100 parts water. The PH of the material furnished for bentonites or montmorillonites or soils in which these clays predominate shall not be less than 1.55 nor more than 1.75 when diluted 1 part chemical to 100 parts water.
The second component shall be capable of increasing the permeation rate of water through clays. It must also, when used in suitable quantities, reduce the plasticity index and the shrinkage and swell factor. The pH of the material furnished shall not be less than 2.5 nor more than 2.7 when diluted 1 part chemical to 100 parts water.

When used together, these two components shall form a chemical interlock so as to improve the general stability of clay. Both components shall be water soluble and must disperse readily when subjected to moderate agitation. It must be possible to place both chemicals simultaneously into a water truck or asphalt distributor and apply them by sprinkling the soil with the solution.

The function of these chemicals when used together shall be as follows:

1. To accelerate the speed with which water will be distributed or redistributed through the clay structure once it has entered into it.
2. To reduce the speed with which moisture is removed from soil structure during periods of dehydration.
3. To increase the tenacity with which water will be retained in the structure against the forces of gravity when the moisture content is at or below normal field capacity.
4. To break the length of continuous capillary systems that exist in clays into smaller segments.

310.05 COMPACT TION: After the treatment material has been thoroughly mixed it shall be spread uniformly to the required cross section and thoroughly compacted in accordance with applicable provisions of 401.12, except that the use of 10-12 ton steel wheel roller will not be allowed for final rolling.

310.07 BASIS OF PAYMENT: The Contractor will be required to open the Chemical Treated Base to traffic as soon as possible. The Contractor will be required to maintain the base prior to paving operations.

310.07 BASIS OF PAYMENT: The accepted quantities of work the CHEMICAL TREATED BASE AND SUBBASE will be paid for at the unit price as set out below:

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<tr>
<th>PAY ITEM</th>
<th>PAY UNIT</th>
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<tbody>
<tr>
<td>Base Processing</td>
<td>Station</td>
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<tr>
<td>Subbase Processing</td>
<td>Station</td>
</tr>
<tr>
<td>Base Chemical</td>
<td>Gallon</td>
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<tr>
<td>Subbase Chemical</td>
<td>Gallon</td>
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<tr>
<td>Water for Processing</td>
<td>M Gallons</td>
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</tbody>
</table>
SECTION 401 - PLANT MIX PAVEMENTS - GENERAL

401.03 JOB-MIX FORMULA

Delete the Sections noted and add the following:

a. **SOURCE OF MATERIALS:** The Contractor shall furnish, on his own forms, to the Engineer detailed information pertaining to the bituminous mixtures for the Project. This information shall include the source of materials, type and size of aggregates, and types of bituminous mixtures and will be used in preparation of the job-mix formula.

b. **JOB MIX FORMULA REQUIREMENTS:** An approved job-mix formula for the bituminous mixture for the project will be submitted by the Contractor to the Engineer five [5] days prior to paving. No mixture will be accepted until the job-mix formula has been received and approved by the Engineer. The job-mix formula will specify:

1. Type of bituminous mixture.
2. Type and size of aggregate.
3. Amount of aggregate to be retained on the No. 6 Sieve based on the total weight of aggregate.

4. Only AC 20 bitumen will be used unless specifically changed in the Special Provisions. The percentage of bitumen will be the net amount calculated on the basis of the total weight of mix exclusive of water or solvent.

5. Maximum acceptable temperature of mixture at the time of discharge from the mixer.
SECTION 500 - RIGID PAVEMENT

501.03 PROPORTIONING
Add to 2nd Paragraph:
The use of Class B concrete as specified in 702.02 shall be allowed as herein provided.

501.03(a) T97, FLEXURAL TEST
Add to Section:
c. When the pavement consists of two [2] different classes of concrete. The Class B Concrete shall be used in the bottom of the form to a depth equal to the ratio of depth in the pavement.

Special care shall be used in assuring a correct specimen.

501.03(c) HIGH EARLY STRENGTH CONCRETE
Add to Section:
When high early strength pavement is specified it shall mean the entire depth of pavement.

No HES Class B shall be allowed.

501.09 MIXING CONCRETE
Add to 5th Paragraph:
When central-mixing is used the trucks delivering the Class A Concrete shall be marked by an identification marker visible as a distance of 500 feet.

501.11 PLACING CONCRETE
Add to Section:
The Class B Concrete shall be placed and struck off to the depth as shown in the Plans. The Class A Concrete shall be placed on Class B as soon as possible and within a maximum time of 30 minutes.

Machine strike-off of the Class B Concrete shall be required
In areas where hand placing and strike-off are used then only Class A Concrete shall be used in full depth.

SECTION 909 - METAL MATERIALS

909.14(a) FLANGED CHANNEL POSTS
Add the following:
Street Name Posts: 2 lb per foot, 10 foot minimum length.
Traffic Control Posts: 2 lb per foot, 11 foot minimum length.
Delineator Posts: 1 lb per foot, 7 foot minimum length.
SECTION 1500 - SEWERS AND RELATED FACILITIES

Add this section:

1500.01 DESCRIPTION This work shall consist of the design and construction of storm and sanitary sewers and related facilities.

Special attention shall be given to the St. Joseph County Design Standards for County Subdivision Projects and also STATE SPECIFICATIONS. This Section 1500 pertains only to special items not covered in the STATE SPECIFICATIONS

1500.02 DESIGN REQUIREMENTS - SEWER FACILITIES All storm and sanitary sewers, sewage pumping stations, and sewage treatment facilities shall be designed in accordance with the latest revision of "Recommended Standards for Sewage Works" as adopted by the Great Lakes-Upper Mississippi River Board of State Sanitary Engineers.

1500.03 DESIGN REQUIREMENTS - ROOF AND PAVED AREAS Drainage and Maintenance-Off street parking facilities shall be graded so as to prevent drainage onto abutting property and/or into the public streets and alleys. Dry wells of a construction capacity and design approved by the Department of Public Works shall be installed to collect runoff water unless adequate storm sewers or drainage ditches are available. Drywells shall be cleaned periodically so that they will collect the design capacity of runoff water. These drainage provisions shall not apply where a different method of disposing of said runoff water is ordered by the St. Joseph County Board of Commissioners.
1500.04 - DESIGN REQUIREMENTS - STORM SEWER CRITERIA

All storm sewer facilities shall be designed in accordance with the latest Standard Drawings as approved by the St. Joseph County Board of Commissioners. This requirement does not preclude the Engineer from requiring the use of higher or more detailed criteria that is published by other technical agencies involved in storm drainage.

1500.05 - PIPE MATERIALS

All sewers shall be constructed of the materials as approved by the Engineer.

1500.06 - JOINT MATERIALS

(a) Sanitary Sewers: All joints for sanitary sewer pipe shall be of such type that meets the following requirements for infiltration and exfiltration plans:

200 gallons per inch diameter of the pipe per mile of pipe in a 24 hour testing period.

All joint materials shall be subject to approval by the Engineer.

1500.07 - APPURTENANCES

(a) Manholes: Manholes are to be accordance with the Standard Drawings and Plans. Special attention shall be given to the infiltration and exfiltration requirements in Section 1500.06 as no allowance will be made for leakage in the manholes.

(b) Inlet and Inlet Pipes: Inlets are to be in accordance with the Standard Drawings and Plans. Inlet pipes shall be included in the specifications pertaining to Storm Sewers.

(c) Miscellaneous Items: All other items pertinent to the Project shall be covered in the Standard Drawings and Plans.

1500.08 - TESTING MATERIAL

All manufactured material used in the Project shall meet all testing requirements of these PREVAILING SPECIFICATIONS. Special attention shall be given to Section 106.

Infiltration and exfiltration tests shall be the responsibility of the Contractor. In the event of failure, the Contractor shall be fully responsible for correction of the problem and retesting of the facility.

Certification of compliance for these several materials does not preclude further testing by the Engineer.

The Engineer reserves the right to reject any material which by his inspection does not fulfill these SPECIFICATIONS.
1500.09 INSPECTION (a) It shall be the responsibility of the Contractor to notify the Engineer of his intent to commence working operations. Said notice shall be issued no less than 24 hours prior to start. The Engineer reserves the right to reject all work based solely upon the failure by the Contractor to comply with this Section.

(b) After the sewers have been placed and backfilling completed, an inspection of the line from manhole to manhole shall be made by the Engineer by flashing a light abutment manholes. On larger lines visual inspection will be made by walking or crawling through the pipe between manholes. Alignment must be true, grades in accordance with elevations established by the Engineer, and no pipe can be misplaced. If alignment and gradient are not satisfactory, the Contractor shall either replace the sewer, or the entire sewer between manholes inspected shall not be accepted. If the Engineer has given written approval for the Contractor to offset a line to miss any obstacles in the proposed alignment of the sewer, the above approval requirement may be eliminated.

1500.10 GENERAL REQUIREMENTS Special attention shall be given to the PREVAILING SPECIFICATION covering the several items of responsibility, backfilling and final acceptance of the work.
SECTION 1600 - PRIVATE IMPROVEMENTS

Add this Section:

1600.01 - DESCRIPTION

A. The purpose of this Section is to outline the proper procedures for approval, construction and acceptance of all storm sewers, sanitary sewers, roads, curbs, sidewalks, drainage and other related improvements constructed by Private Parties which shall be dedicated to the County of St. Joseph, Indiana.

B. For the purpose of this Section Private Parties shall be defined as any individual(s), firm(s), business, corporation(s) or other organized body responsible for the promotion and the construction of the above listed improvements.

1600.02 - PRIVATE IMPROVEMENTS IN UNDERCUTTED AREAS

A. Initial Approval: It shall be the responsibility of the Private Party to submit to the Engineer all Final Plans and Specifications related to the proposed Improvements for review. all Plans shall be prepared and sealed by a Professional Engineer registered in the State of Indiana. Accompanying these documents and his request for approval the Private Party shall furnish the Department proof of final plat approval as issued by the appropriate agency. Construction activities shall not begin unless all Plans, Specifications and related documents are approved by the Department.

B. Construction Phase

1. Control of Work: All work shall be in strict accordance with these Special Provisions.

2. Notification to Engineers: Section 1500.005(a) shall apply in atotal.

C. Acceptance of Improvements. Upon completion of work the Private Party shall request Final Inspection and acceptance by the Engineer, the Private Party shall submit the following documents to the Department with his request for acceptance of the improvements:

1. As-Built Plans: A complete set of reproducible documents, modified as required so as to reflect all As-Built dimensions.

2. Waiver of Lien: On all workmanship and materials used in connection with these improvements.
3. Maintenance Bond, as per Section 103.03.
4. Completion Affidavit, as furnished by the Department, [See Sec. 109.07]
5. Item 3 and 4 above shall list the Private Party as the first party to all
documents. Maintenance Bonds and Completion Affidavits will not be accepted from individual
contractors or service firms.

D. Uncompleted Work: Should acceptance by the Department be requested by the
Private Party prior to the completion of all improvements, a Modified Completion Affidavit may
be issued at the discretion of the Engineer, if the following conditions are met:
1. Posting with the Department one of the following Surety items to issue
completion of the balance of all improvements:
   a. Certificate of Deposit
   b. Certified Check
   c. Any equally negotiable instrument equal to [a] and [b] above; all such
      instruments in the amount of 100% of the cost of the uncompleted improvements.

NOTE: Surety Required:
1. for Roads and Streets
   1 for Drawings - Retention Ponds and Drainage Swales

1600.03 - PRIVATE IMPROVEMENTS IN DEDICATED AREAS
A. Initial Approval As per Section 1600.02(a)
   Delete all reference to final plat approval
   Add the following:
   1. It shall be the responsibility of the Private Party [or his authorized agent] to
      secure all appropriate permits.
      The Private Party shall submit a document acceptable to the Department stating his
      intent to dedicate any additional right-of-way or easements as required by the proposed Plans and
      Specifications.

B. Construction Phase As per Section 1600.02(b) in its entirety.
   Add the following: The Private Party shall also furnish to the Department
documentation of Grants of Right-of-Way and/or Easements necessitated by an improvements
constructed outside the existing right-of-way and/or easements. All such documentation shall be
furnished on forms approved by the Department.