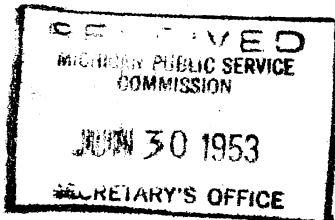


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THIS AGREEMENT, made this 16th day of March.

A.D., 1953, by and between the MICHIGAN STATE HIGHWAY DEPARTMENT, acting through Charles M. Ziegler, as State Highway Commissioner of the State of Michigan, Hereinafter referred to as the HIGHWAY DEPARTMENT, party of the first part; the BOARD OF COUNTY ROAD COMMISSIONERS OF THE COUNTY OF WAYNE, MICHIGAN, a public body corporate, hereinafter referred to as the BOARD, party of the second part; the CITY OF DETROIT, a municipal corporation organized and existing under the laws of the State of Michigan, hereinafter referred to as the CITY, party of the third part; THE MICHIGAN CENTRAL RAILROAD COMPANY, a Michigan corporation, and THE NEW YORK CENTRAL RAILROAD COMPANY, a consolidated corporation organized and existing under the laws of the State of Michigan and other States, acting in its own right and as Lessee of the Michigan Central Railroad, said two Railroad Companies being hereinafter collectively referred to as the NEW YORK CENTRAL, parties of the fourth part; and GRAND TRUNK WESTERN RAILROAD COMPANY, a consolidated corporation organized and existing under the laws of the States of Michigan and Indiana, having its principal offices at Detroit, Michigan, hereinafter referred to as the GRAND TRUNK, party of the fifth part; the first three parties being hereinafter referred to collectively as the PUBLIC AUTHORITIES, and the last two parties being hereinafter referred to collectively as the RAILROADS;

W I T N E S S E T H:

WHEREAS, the PUBLIC AUTHORITIES, through an agreement dated April 17, 1951, in conformity with existing laws, have agreed to construct two limited access expressways in the City of Detroit, one of which is the Edsel Ford Expressway, hereinafter referred to as the Expressway; and

WHEREAS, the proposed location of the Edsel Ford Expressway crosses the rights-of-way and tracks of the RAILROADS, West of Twelfth Street and North of Kirby Avenue, in the City of Detroit, Wayne County, Michigan; and

WHEREAS, the separation of railroad and highway grades, at said proposed crossing of the Expressway with the rights-of-way and tracks of the RAILROADS, by means of a highway underpass structure with each railroad as a matter of public safety and convenience, has been approved by the Bureau of Public Roads, United States Department of Commerce, as a Project for construction through the partial use of funds to be expended under the provisions of "Federal-Aid Highway Act of 1944" and Public Law #521, 78th Congress (S-2105), approved December 20, 1944; and

WHEREAS, the parties hereto have reached an understanding with each other respecting said crossings and said highway underpass structures, including the preparation and approval of plans and specifications, the construction of temporary works necessary to provide for the operation of the trains of the RAILROADS during the construction period, the construction of the permanent highway underpass structures and approaches, the incidental work made necessary by such highway underpass construction, all hereinafter from time to time referred to as the Project, and the maintenance, repair, replacement and renewal thereof, and the payment of the cost of the same; and desire to set forth their understanding in the form of a written agreement;

NOW, THEREFORE, in consideration of the premises and the mutual undertakings of the parties hereto, it is agreed:

Section 1: That any and all financial obligations assumed by the HIGHWAY DEPARTMENT, the BOARD or the CITY, individually or collectively, (except as to future maintenance, repair, replacement and renewal provided for in Section 19 hereof) under this agreement are to be shared by the PUBLIC AUTHORITIES as outlined in said HIGHWAY DEPARTMENT-COUNTY-CITY agreement dated April 17, 1951.

Section 2: That, in accordance with the plans and the Supplemental Specifications and the sundry other specifications hereinafter mentioned, the PUBLIC AUTHORITIES will construct highway underpass structures carrying the tracks of the GRAND TRUNK and the NEW YORK CENTRAL over the proposed Expressway at the proposed crossings at the location aforesaid, without compensation to the

RAILROADS other than that covered by this agreement; and, for the purpose of said construction, said PUBLIC AUTHORITIES and their contractors may enter upon and occupy the property of each of the RAILROADS, provided that, immediately upon completion of said work such railroad property shall be restored to a condition deemed by the Chief Engineer of each respective railroad, or his authorized representative, to be suitable for railroad purposes.

Section 3: That each of the PUBLIC AUTHORITIES will, by proper action in a manner provided by law, adopt the lines shown upon the profiles, maps and plans, hereto attached as exhibits, as the profiles fixing the levels to which the Expressway approaches to the proposed highway underpass structures shall be constructed and each of the RAILROADS hereby approve the vertical and horizontal clearances of the bridges required to carry their respective tracks over said Expressway, as shown on the plans.

Section 4: That the general plans of the Project are shown on the following exhibits which are attached to and made a part of this agreement:

Exhibit A - General Plan of Site, showing present topography, location of proposed highway underpass structures, present ground profile and proposed crown of roadway profile on the Expressway, and proposed width of right of way of the Expressway.

Exhibit B - General Plan of Project, showing provisions for the permanent and temporary tracks of the RAILROADS, present profiles of the RAILROADS, present rights of way of the RAILROADS and proposed right of way of the Expressway.

Exhibit C - General Plan of Structure, showing general features of the proposed NEW YORK CENTRAL and GRAND TRUNK highway underpass structures, and highway and railroad clearances.

Exhibit D - Digging Plan and Part Sequence of Operations, showing construction procedure for the excavation for the Project.

Exhibit E - Estimated cost of the work to be performed by the NEW YORK CENTRAL on a force account basis.

Exhibit F - Estimated cost of the work to be performed by the GRAND TRUNK on a force account basis.

Section 5: That the NEW YORK CENTRAL will prepare and furnish all designs, detailed plans and specifications for the temporary trackwork, including grading and temporary trestles, necessary to take care of its railroad traffic during the construction period for the permanent trackwork necessitated by the Project, and for the highway underpass structure carrying its traffic over the Expressway; and, likewise, the GRAND TRUNK will prepare and furnish all designs, detailed plans and specifications for the temporary trackwork, including grading, necessary to take care of its railroad traffic during the construction period, for the permanent trackwork necessitated by the Project, and for the highway underpass structure carrying its traffic over the Expressway. Said designs, plans and specifications from each railroad shall be subject to the approval of each of the PUBLIC AUTHORITIES insofar as their respective interests may appear, and shall receive the approval of the Bureau of Public Roads, United States Department of Commerce, before the commencement of work thereon and the awarding of construction contracts for such work. Said work shall be designed, detailed and constructed in accordance with the specifications and standards of the HIGHWAY DEPARTMENT, except that the current American Railway Engineering Association Specifications shall govern the design of such portions of the work as carry railroad loading. The HIGHWAY DEPARTMENT will reimburse each of the RAILROADS for the cost of surveys and the preparation of the aforesaid designs, detail plans, and specifications and for the cost of the preparation of the estimate of cost of the work to be performed by each of the RAILROADS on a force account basis. Such costs shall include the salaries of engineers, draftsmen and designers actually chargeable to the Project, to which shall be added the surcharges and overhead percentages specified in the General Manager's Association of Chicago Rules Covering Preparation of Joint Facility Bills, dated February 1, 1951, and

supplements thereto. The cost of the work covered by this section shall not be considered as eligible for Federal Participation as a part of the cost of the Project.

Section 6: That the HIGHWAY DEPARTMENT will prepare and furnish all designs, detail plans and specifications for the highway approaches, including drainage structures where required. The designs, plans and specifications will be subject to the approval of the RAILROADS, the BOARD and the CITY insofar as their respective interests may appear, and will receive approval of the Bureau of Public Roads, United States Department of Commerce, before the awarding of construction contracts for such work. All of said work will be designed, detailed and constructed in accordance with the current specifications and standards of the HIGHWAY DEPARTMENT.

Section 7: That, in order to provide for the continued operation of the railroad of the GRAND TRUNK during the construction of the highway underpass structure carrying its tracks over the highway, it is necessary to make arrangements for the use of land, situated adjacent to and easterly of its right of way and belonging to THE NEW YORK CENTRAL RAILROAD COMPANY, as a site for a portion of the temporary detour track shown by dashed lines on said Exhibit B, during the period of construction.

THE NEW YORK CENTRAL RAILROAD COMPANY hereby agrees that the PUBLIC AUTHORITIES may construct and maintain temporary trestles and approach fills to carry the tracks of the RAILROADS, and that the GRAND TRUNK may construct its tracks thereon, together with tracks approaching said temporary trestles, as shown by dashed lines on said Exhibit B, on said land and extending across Kirby Avenue, and the GRAND TRUNK, conditioned upon its indemnifying and saving harmless THE NEW YORK CENTRAL RAILROAD COMPANY, as the owner of said land, against and from any and all liability for injury to or death of persons, and loss of or damage to property, arising out of such use, may use said tracks as temporary detour tracks so long as such use is necessary during said construction period.

The PUBLIC AUTHORITIES hereby agree that, upon the cessation of the use of said temporary detour track by the GRAND TRUNK, they (the PUBLIC AUTHORITIES), at their own cost and expense, will remove or will cause to be removed, said temporary detour tracks and their supporting trestles, and restore the lands and premises of THE NEW YORK CENTRAL RAILROAD COMPANY to a condition deemed by its Chief Engineer to be satisfactory for railroad use.

Section 8: That the HIGHWAY DEPARTMENT, on behalf of the PUBLIC AUTHORITIES, will undertake and perform, through Contractors, the construction work of said Project, including the new highway underpass structures, the construction and removal of the temporary grading for diversion of the tracks of the RAILROADS during the construction period, the construction and removal of the temporary trestles, the maintenance of the temporary trestles during the period of their use by the GRAND TRUNK, the construction of the highway approaches, the construction of highway and railroad drainage facilities where required, and all work incidental to any of the foregoing occasioned by the Project, excepting the work agreed in Section 11 hereof to be performed by the RAILROADS.

Section 9: That the HIGHWAY DEPARTMENT will advertise its portions of the work in accordance with its regulations, considering bids therefor only from contractors prequalified by it for such work and approved by the Chief Engineers of the RAILROADS, will award the contracts therefor and will exercise complete supervision and control over such construction. Each railroad may, at Project expense, place on the work a competent engineer together with the necessary assistants, who shall assist the field representative of the HIGHWAY DEPARTMENT to the fullest extent in order to coordinate the work and obtain the greatest progress with the minimum of delay and interference in carrying out the general highway underpass Project, and said engineers of each railroad shall have the right to inspect the erection and construction of all steel work, masonry and other parts of the structure and drainage provisions located upon or extending across the right of way of the railroad, and the construction, maintenance and removal of the temporary trestles for the railroad. Said Engineer of each railroad, acting through the HIGHWAY DEPARTMENT'S engineer shall have the right to

reject any or all of the aforesaid work which is not executed pursuant to the aforesaid plans and specifications.

Section 10: That the HIGHWAY DEPARTMENT will require its contractor or contractors to comply with the Supplemental Specifications (Special Provisions) approved by the RAILROADS and the PUBLIC AUTHORITIES, attached hereto and made a part hereof, and to bear all costs of protecting railroad traffic made necessary or occasioned by his operations, as set forth in said Supplemental Specifications (Special Provisions). Each of the RAILROADS agrees to furnish, at the sole expense of the HIGHWAY DEPARTMENT'S Contractor, such flagmen, switchtenders, telegraph operators, watchmen, conductors or pilots and other protective services and devices as, in the opinion of the Chief Engineer, are required to insure safety and continuity of its railroad traffic during the Contractor's operations. The HIGHWAY DEPARTMENT will, by appropriate contract provisions, require its contractor or contractors to reimburse each respective railroad for such services and devices promptly on receipt of bills, and agrees to withhold final payment to its contractor or contractors until each respective railroad has notified the HIGHWAY DEPARTMENT that all such bills have been settled. It is further expressly understood that no provisions of this paragraph, nor approval by either of the RAILROADS as to construction operations, shall relieve the contractor or contractors of any responsibility or liability under this agreement.

Section 11: That each of the RAILROADS will, on a force account basis, using its own forces, (a) Furnish all material and equipment and make all necessary temporary and permanent changes to its communication and signal lines; and (b) Furnish all material, labor and equipment for removing, altering, grading, ballasting, restoring and maintaining the permanent tracks; and (c) Furnish all necessary materials and equipment, including ballast but excluding trestle ties, and perform all work involved in the construction, maintenance and removal of the temporary tracks. The construction and removal of the temporary trestles and the grading work specifically covered by Section 8 hereof will be done by the HIGHWAY DEPARTMENT'S Contractor. The NEW YORK CENTRAL will maintain the temporary trestles during the period of their use by that Railroad, but the HIGHWAY DEPARTMENT'S Contractor will maintain the temporary trestles during the period of their use by the GRAND TRUNK. Each of the RAILROADS will perform, at Project Expense, the shop and mill inspection incident to the fabrication of steel work for the new highway underpass structure to carry its own tracks. The GRAND TRUNK

will credit the HIGHWAY DEPARTMENT an amount equivalent to its normal maintenance expenditure for tracks between Station 3017 + 10 and 3029 + 90, the NEW YORK CENTRAL will credit the HIGHWAY DEPARTMENT an amount equivalent to its normal maintenance expenditure for its two main tracks between Station 109 + 60 and 124 + 80, and each of the RAILROADS will credit the HIGHWAY DEPARTMENT with the salvage value of all track, signal and communication material used on a temporary basis during the construction of the Project, and accepted by that railroad for return to its stock. Such salvage value is to be computed in accordance with the regulations of the Bureau of Public Roads, United States Department of Commerce, General Administrative Memorandum No. 299 dated May 1, 1946.

In connection with the work to be done by each of the RAILROADS, each railroad, at Project expense, will carry Workmen's Compensation and Employer's Liability Insurance, Contractor's Public Liability and Property Damage Liability Insurance, and Owner's Protective Liability and Property Damage Liability Insurance in favor of the BOARD and the CITY, similar in character and amounts to that which is to be carried by Contractors, as outlined in the Supplemental Specifications (Special Provisions) attached hereto and made a part hereof. In lieu of any or all of such insurance each railroad may, at its own option, provide similar protection as a self-insurer, it being understood that the "Project expense" above mentioned means only insurance premiums or the equivalent thereof. Each Railroad shall submit copies of its policies or statements of responsibility covering the above risks to the HIGHWAY DEPARTMENT for review, the Contractors Public Liability and Property Damage Liability Insurance policy and the Workmen's Compensation Insurance policy to remain the property of the railroad and to be returned to same by the HIGHWAY DEPARTMENT with its approval indicated thereon.

Each of the RAILROADS will keep an accurate and detailed account of the cost and expense incurred by it in the performance of the work which it herein

agrees to undertake and perform, including the procurement of the aforementioned insurance, which said account shall be accessible for review and auditing by the HIGHWAY DEPARTMENT and by the Bureau of Public Roads, United States Department of Commerce. All bills submitted to the HIGHWAY DEPARTMENT by each railroad for any items of work performed, or materials or equipment furnished, by that RAILROAD under the terms of this agreement, except as provided in Section 5, shall be prepared in accordance with the provisions of General Administrative Memorandum No. 299 of the Bureau of Public Roads, United States Department of Commerce. The HIGHWAY DEPARTMENT will reimburse each railroad the cost and expense so incurred by it, monthly, keeping a ten per cent (10%) reserve on all current bills. Final payment will be made to each railroad after said Bureau of Public Roads, United States Department of Commerce, has made its final audit. The HIGHWAY DEPARTMENT will pay only such amounts as are approved for payment by the Bureau of Public Roads, United States Department of Commerce, in accordance with its regulations, except that it will pay, from the PUBLIC AUTHORITIES funds, the cost of any and all items or parts thereof, included in each railroad's bills, which are not reimbursable by the Bureau of Public Roads, but for which that railroad is entitled to payment under the provisions of this agreement, it being the intent that, in part consideration for the right herein granted by the RAILROADS to the HIGHWAY DEPARTMENT to open the highway across the right of way and tracks of the RAILROADS at the location aforesaid, the HIGHWAY DEPARTMENT agrees to provide the complete highway underpass Project without initial cost or expense to the RAILROADS.

Section 12: That it is expressly understood and agreed that the Project herein contemplated is to be financed partially from funds appropriated by the Federal Government and expended under Federal laws and regulations, which laws and regulations are hereby incorporated in and made a part of this agreement; and that, in the event delays or difficulties occur, which, in the opinion of the PUBLIC AUTHORITIES, render it impracticable to proceed with the construction of the Project,

and such event occurs before the commencement of physical operations hereunder, the PUBLIC AUTHORITIES may serve written notice thereof upon the RAILROADS and this agreement shall thereupon terminate forthwith.

Section 13: That in consideration of the completion of the Project herein provided for, and pursuant to all of the terms and conditions of this agreement, and the full, prompt and faithful performance thereafter by the PUBLIC AUTHORITIES of all the terms and conditions hereof, the respective RAILROADS hereby grant to the State of Michigan an easement for highway purposes for said Expressway under its respective tracks and across its right of way, one hundred and six (106) feet wide, and as much wider as may be necessary to accommodate the grade separation structures, together with easements for the construction and maintenance of slopes and drainage facilities for so long as same may be required in connection with said Expressway. It is expressly understood that neither of the Railroads shall have access from its abutting property to said Expressway within the area affected during the continuance of this easement, and that the existing access ramp from Kirby Avenue to the NEW YORK CENTRAL property will be eliminated by the construction of this Project.

The HIGHWAY DEPARTMENT agrees to purchase from the NEW YORK CENTRAL for highway purposes at an agreed upon price of Thirty One Hundred (\$3,100.00) Dollars, the triangular parcel of land abutting the tracks of the NEW YORK CENTRAL and fronting on the north side of Kirby Avenue, said parcel of land lying within the proposed Edsel Ford Expressway right of way, as shown on Exhibit A attached hereto, and being described as Lot 13 of the subdivision of outlot number 1 of Lafferty Farms. The NEW YORK CENTRAL agrees to furnish the HIGHWAY DEPARTMENT a deed, vesting all of its right, title and interest for the land owned by it within the aforesaid limits.

Section 14: That the PUBLIC AUTHORITIES will, at no expense to the RAILROADS, secure the necessary right of way, except that now owned by the RAILROADS as covered by the first paragraph of Section 13 hereof, and hereby do assume the payment of all abuttal damages, if any there be, to property, business or persons other than the property of the RAILROADS, arising in any way from said Project, and of all costs, expenses,

charges or liability in any proceedings which may be instituted in effecting such Project, or which may be instituted to prevent the performance of this agreement. It is understood that the performance of this agreement on the part of each of the RAILROADS shall release and discharge it from any and all charges, damages, or liability, and be accepted as a full discharge of all obligations of each of the RAILROADS, present or future, arising out of this agreement and the performance thereof, except as provided in the first paragraph of Section 13, and also in Section 19 hereof.

The PUBLIC AUTHORITIES subject to the legal limitations of the HIGHWAY DEPARTMENT in the matter of indemnification for negligence hereby assume to themselves, and hereby agree to pay and assume and indemnify and save harmless each of the RAILROADS from and against all the aforesaid damages, costs and expense, without charge, recourse to or recharge over against either of the RAILROADS; and each of the RAILROADS hereby waives any and all claims for damages to itself or to any abutting property owned or controlled by it within the extent of the Project by reason of the construction of the Project or the limiting of access ^{to} the Expressway. THE NEW YORK CENTRAL agrees to indemnify and save harmless the PUBLIC AUTHORITIES from claims for such damages made by any business or persons as a result of elimination of the existing access ramp from Kirby Avenue to NEW YORK CENTRAL property.

Section 15: That in the matter of assessment of highway - railway separation benefits as provided in the Federal-Aid Highway Act of 1944, it is recognized that this Project involves the new crossing of the RAILROADS, without permitting the closing of any existing highway crossing of either railroad, and as such involves no elimination of existing crossing facilities or construction, provides no accident record from which either railroad may expect improvement nor provides for ^{existing of separation} the release on the part of either railroad of any previous maintenance obligations, taxes or assessments and therefore that the benefits to the RAILROADS for purposes of the Federal-Aid Highway Act of 1944 are nil.

Section 16: In addition to the insurance required under Section 11 hereof, the RAILROADS shall carry such insurance as they deem necessary to protect themselves from financial loss due to liabilities growing out of the ownership of the premises

where construction of the aforesaid project is undertaken. The premium cost of such insurance shall be deemed part of the cost of the project, and within the limitations prescribed in the Supplementary Specifications--Special Provisions-- for the contractors engaged in such work, shall be reimbursed to the RAILROADS by the PUBLIC AUTHORITIES; provided, however, that to the extent that any such loss, damage or liability shall be borne by the contractors, or covered by such insurance, or caused by the sole negligence of the RAILROADS or either of them, it shall not be charged to the Project nor reimbursed by the PUBLIC AUTHORITIES.

Section 17: That, in connection with this Project, the HIGHWAY DEPARTMENT will require its contractor or contractors engaged in such construction to carry insurance in the types, amounts and forms, and with insurers, acceptable to each of the RAILROADS, and to each of the PUBLIC AUTHORITIES, as set forth in the Supplemental Specifications (Special Provisions) attached hereto and made a part hereof.

Section 15: That, if, at any time, without fault of the parties hereto, the work which is hereunder agreed to be done by the PUBLIC AUTHORITIES shall cease and not be resumed within sixty (60) days, the parties hereto, unless then otherwise agreed, will agree upon and perform such work as is reasonably necessary to place the highway and the right-of-way and tracks of each of the RAILROADS in satisfactory permanent operating condition, and the PUBLIC AUTHORITIES will assume and pay the cost thereof, provided that the aforesaid sixty-day limitation shall not apply to the temporary suspension of work under order of any Governmental agency or court having jurisdiction, in which event the work shall be resumed and completed, as soon as may be, in accordance with the terms of this agreement.

Section 19: That, when the work of construction of said Project has been completed, each of the RAILROADS, at its own cost and expense, will maintain, repair, replace and renew, or cause the same to be done, as and when the circumstances may require, its respective tracks and the supporting embankment, and each railroad, at its own cost and expense, will repair, or replace, or cause to be repaired or replaced, any portion of the highway underpass structure carrying railroad traffic over the Expressway, the roadway surfacing, the roadway slopes and the drainage facilities which may be damaged or destroyed by accident, or otherwise, resulting from its railroad traffic. The HIGHWAY DEPARTMENT, at its own cost and expense, will maintain, repair, replace and renew, or cause the same to be done, as and when the circumstances may require, the highway underpass structures carrying railroad traffic over the Expressway, the roadway surfacing, the roadway slopes and the drainage facilities, and also, at its own cost and expense, will repair or replace, or cause to be repaired or replaced, any portions of the said highway underpass structures which may be damaged or destroyed by accident, or otherwise, resulting from highway traffic; and, to this end, the HIGHWAY DEPARTMENT, as and when requested from time to time by the Chief Engineer of the railroad involved, will make, or cause to be made, such repairs, replacements and renewals to the highway underpass structure involved as, in the judgement of said Chief Engineer, are necessary to the safe operation of the locomotives, trains and cars of the railroad involved over and upon said structure. In the event that the HIGHWAY DEPARTMENT shall fail or refuse, for a period of twenty (20) days from the date of service upon it by the Chief Engineer of the railroad involved, of any notice to repair, replace or renew said highway underpass structure, or any part or parts thereof, to proceed with or to arrange for the making of such repairs, replacements or renewals, and to prosecute, or cause the prosecution of, said work diligently to completion, the railroad involved, in addition to all other remedies, and, at its option, may make such repairs, replacements or renewals to said highway underpass structure.

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at the cost and expense of the HIGHWAY DEPARTMENT, which cost and expense, the HIGHWAY DEPARTMENT hereby agrees to pay to the railroad involved within thirty (30) days from the date of rendition of bills therefor. Notwithstanding anything herein to the contrary contained, the CITY, pursuant to the provisions of law, shall reimburse the HIGHWAY DEPARTMENT the CITY'S share of the cost and expense incurred by the HIGHWAY DEPARTMENT under this Section 19.

Section 20: That it is specifically understood and agreed that this agreement shall become and be binding upon the parties hereto, their successors and assigns, when but not until, the Michigan Public Service Commission has entered an order authorizing, permitting and approving the foregoing Project, and the Bureau of Public Roads, United States Department of Commerce, has approved the Project plans, and the State Administrative Board of the State of Michigan, has, by resolution, approved this Project and authorized the State Highway Commissioner to proceed therewith.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed by their proper officers thereunto duly authorized the day and year first above written.

Approved for the Michigan State Highway Department, the Board of County Road Commissioners of the County of Wayne, Michigan, the City of Detroit, The Michigan Central Railroad Company, the Grand Trunk Western Railroad Company, and the New York Central Railroad Company, as to substance and engineering:

MICHIGAN STATE HIGHWAY DEPARTMENT
By *A. R. Puffer*
Bridge Engineer

BOARD OF COUNTY ROAD COMMISSIONERS
OF THE COUNTY OF WAYNE, MICHIGAN
By *H. H. Shusterman*
Engineer of Bridges and Structures

MICHIGAN STATE HIGHWAY DEPARTMENT
By *Charles M. Diegel*
State Highway Commissioner of
the State of Michigan

BOARD OF COUNTY ROAD COMMISSIONERS
OF THE COUNTY OF WAYNE, MICHIGAN
By *Chas L Wilson*
Chairman
By *Michael J. Buier*
Vice-Chairman
By *John Potlana*
Commissioner

CITY OF DETROIT

By [Signature]
Acting Commissioner of Public Works

THE MICHIGAN CENTRAL RAILROAD COMPANY
AND
THE NEW YORK CENTRAL RAILROAD COMPANY

By J. H. Simpson
Chief Engineer

GRAND TRUNK WESTERN RAILROAD COMPANY

By [Signature]
Chief Engineer

Approved as to form:

MICHIGAN STATE HIGHWAY DEPARTMENT

By _____

BOARD OF COUNTY ROAD COMMISSIONERS
OF THE COUNTY OF WAYNE, MICHIGAN

By A. A. Campbell

CITY OF DETROIT

By _____

THE MICHIGAN CENTRAL RAILROAD COMPANY
AND
THE NEW YORK CENTRAL RAILROAD COMPANY

By [Signature]
GENERAL ATTORNEY

GRAND TRUNK WESTERN RAILROAD COMPANY

By [Signature]

Accounting
Features
COM

Approved
[Signature]
Vice-President & General Manager

APPROVED
MICHIGAN PUBLIC SERVICE
COMMISSION

JUL 6 1953
[Signature]
DIRECTOR RAILROAD DIVISION

CITY OF DETROIT

By Albert P. Cobo
Mayor

By Thomas J. Leadbetter
City Clerk

THE MICHIGAN CENTRAL RAILROAD COMPANY

By F. J. Jesone
Vice-President

Attest: [Signature]
SECRETARY

THE NEW YORK CENTRAL RAILROAD COMPANY,
acting in its own right and as Lessee
of the Michigan Central Railroad

ATTEST

[Signature]
SECRETARY

By F. J. Jesone
Vice-President

GRAND TRUNK WESTERN RAILROAD COMPANY

By [Signature]
VICE PRESIDENT

Attest: [Signature]
Secretary

APPROVED AS TO FORM

Walter E. Vashak
acting Corporation Counsel

CONFIRMED BY
THE COMMON COUNCIL

MAY 20 1953 MAY 26 1953

Thomas J. Leadbetter
CITY CLERK

SUPPLEMENTAL SPECIFICATIONS

SPECIAL PROVISIONS

The Bidder, if awarded the contract for this Project, agrees:

1. To cooperate with public utility, railroad or other organizations having occasion to carry on its usual work within the limits of the Project or to do work on and in connection with the Project.
2. To conduct his work in such a manner that the construction of the Project, including the highway underpass structures and all incidental and related work, shall be executed without damage, and, insofar as is possible, without delay to the trains of the RAILROADS; and to observe such restrictions and regulations as the Chief Engineer of each of the RAILROADS or his representative on the ground, acting through the State's Engineer, may impose to insure the safety and dispatch of persons and property of, or in care of, the railroad company involved and for the safe and expeditious operation of its trains.
3. To avoid unnecessary use of railroad property without written permission of the railroad company involved and to leave roadbed and property in a condition acceptable to the Chief Engineer of the railroad company involved.
4. To carry the following insurance, in a form, and with an insurer, or insurers, acceptable to the MICHIGAN STATE HIGHWAY DEPARTMENT, the CITY OF DETROIT, the BOARD OF COUNTY ROAD COMMISSIONERS OF THE COUNTY OF WAYNE, MICHIGAN, THE NEW YORK CENTRAL RAILROAD COMPANY, THE MICHIGAN CENTRAL RAILROAD COMPANY and the GRAND TRUNK WESTERN RAILROAD COMPANY:
 - (a) Workmen's Compensation Insurance.
 - (b) Contractor's Public Liability and Property Damage Liability Insurance.

The Contractor shall furnish to the HIGHWAY DEPARTMENT and each of the RAILROADS copies of policies as evidence that, with respect to the operations he performs, he carries standard Contractor's Public Liability Insurance providing for a limit

of not less than Two Hundred Thousand Dollars (\$200,000.00) for all damages arising out of bodily injuries to or death of one person, and, subject to that limit for each person, a total limit of Five Hundred Thousand Dollars (\$500,000.00) for all damages arising out of bodily injuries to or death of two or more persons in any one accident, and standard Contractor's Property Damage Liability Insurance providing for a limit of not less than One Hundred Thousand Dollars (\$100,000.00) for all damages arising out of injury to, or destruction of, property in any one accident, and, subject to that limit per accident, an aggregate limit of Three Hundred Thousand Dollars (\$300,000.00) for all damages arising out of injury to, or destruction of, property during the policy period. If any part of the work is sublet, similar insurance with like amounts of coverage shall be provided by or in behalf of the subcontractors to cover their operations.

Contractual Insurance is to be provided or the Contractual Exclusion shall be removed from the policy by an endorsement which is to read as follows: "It is hereby agreed that the Contractual Exclusion does not apply to the Contract entered into between the insured and the Department on this Project".

- (c) Protective Public Liability and Property Damage Liability Insurance in behalf of THE MICHIGAN CENTRAL RAILROAD COMPANY, THE NEW YORK CENTRAL RAILROAD COMPANY, the GRAND TRUNK WESTERN RAILROAD COMPANY, the BOARD OF COUNTY ROAD COMMISSIONERS OF THE COUNTY OF WAYNE, MICHIGAN, and the CITY OF DETROIT, MICHIGAN.

In addition to the insurance required by subdivisions (a) and (b), he shall furnish to the HIGHWAY DEPARTMENT and each of the RAILROADS copies of policies as evidence that, with respect to the operations he or any of his subcontractors perform, he has provided for and in behalf of the RAILROADS, the BOARD and the CITY, as their interests may appear, standard Protective Public Liability Insurance providing for a limit of not less than Two Hundred Thousand Dollars (\$200,000.00) for all damages arising out of bodily injuries to or death of one person and, subject to that limit for each person, a total limit of Five Hundred Thousand Dollars (\$500,000.00) for all damages arising out of bodily injuries

to or death of two or more persons in any one accident, and standard Protective Property Damage Liability Insurance providing for a limit of not less than One Hundred Thousand (\$100,000.00) Dollars for all damages arising out of injury to or destruction of property in any one accident, and, subject to that limit per accident, an aggregate limit of Three Hundred Thousand (\$300,000.00) Dollars for all damages arising out of injury to or destruction of property during the policy period.

(d) General

The insurance hereinbefore specified shall be with an acceptable insurance company authorized to do business in the State of Michigan and shall be taken out before work is commenced and kept in effect until all work required to be performed under the terms of the contract is satisfactorily completed as evidenced by the formal acceptance by the HIGHWAY DEPARTMENT. Each policy shall be provided with an endorsement providing advance notice of termination, cancellation or material change which is to be worded as follows: "It is hereby agreed that 10 days' advance notice of termination, cancellation or material change in the coverage provided by this policy will be given to the Michigan State Highway Department, the City of Detroit, the Board of County Road Commissioners of the County of Wayne, The New York Central Railroad Company and the Grand Trunk Western Railroad Company." The Contractor shall also file notice with the Department at least ten days previous to the cancellation of any of the above coverage. If any of the insurance is cancelled, the Contractor and all subcontractors shall cease operations on the date of cancellation, and shall not resume operations until new insurance is in force.

The cost of the insurance hereinbefore specified will not be a specific bid item but it is agreed that the cost of such insurance will be covered in the various unit prices bid.

5. To pay to each of the RAILROADS the cost of flagmen, switchtenders, telegraph operators, watchmen, conductors or pilots and other protective services and devices furnished by it and made necessary, in the judgment of the Chief

Engineer of the railroad involved or his representative on the ground, because of any of the Contractor's operations, over, under, or adjacent to tracks within clearance limits of vertical planes on each side of track eight (8) feet horizontally distant from the nearest rail over which trains are operating, all as more particularly set forth in the following paragraphs:

- (a) Such protection will be required when men or equipment are working within the above clearance limits or when work is being performed adjacent to operating tracks which may present hazards to tracks or train operations, or when equipment is used which does or may infringe on such clearance limits. The Contractor will not be permitted to operate any of his own equipment on railroad tracks except under proper arrangement with the railroad company involved. Such equipment and the operation of such equipment, or equipment rented from either railroad company, shall be arranged for by the Contractor with the railroad company involved and the cost for its use, including protection of railroad traffic, shall be borne by the Contractor.
- (b) The Contractor shall notify the Chief Engineer of the Grand Trunk Western Railroad Company and the District Engineer of the New York Central Railroad Company in writing, forty-eight (48) hours in advance of starting any work which might require protection. If this requirement is not complied with the Railroad may have the work stopped until arrangements for protection are made. No additional payment will be allowed the contractor for damages or as other compensation by reason of such stoppage of work.
- (c) All such protection costs shall be provided for by the Contractor in the several unit prices bid, and railroad bills for such protection costs shall be paid promptly. Before final payment is made to the Contractor, he shall submit satisfactory evidence that he has paid each of the RAILROADS for protection services and devices furnished.
- (d) Protection costs will be charged the Contractor by the RAILROADS on the basis of the rates required to be paid by the railroad involved, pursuant to the working agreements between such railroad and its employees. Such costs shall include actual cost of wages paid, including unemployment, retirement, vacation allowances, and other payroll taxes, and other standard and legal costs incidental thereto.

The Contractor shall consult with the proper operating and engineering representatives of each of the RAILROADS to determine the type and costs of protection required to insure safety and continuity of its railroad traffic incident to the particular methods and equipment to be used for the work, and shall satisfy himself as to the provisions of the several working agreements between each of the RAILROADS and its employees, insofar as these agreements may affect the cost of protection.

Unless some unusual methods of construction are adopted, protection of railroad traffic should be limited to the following:

- (1) Conductor service to protect men and equipment while work is being performed within prescribed clearances or above tracks; while construction plant, equipment or materials are being moved across tracks; and while workmen are required to cross continuously back and forth across tracks in performance of their work.

- (2) Switchtenders and/or operators as required for temporary railroad operation.
 - (3) Providing shanty for conductor's use, including the installation of dispatcher's telephone.
 - (4) Installation and maintenance of slow boards and lamps.
6. To pay the railroad or owning company for any changes in railroad property or facilities, or wire and pipe lines (other than shown on the plans for the Project) made by the railroad or owning company at the request of the Contractor for his convenience.

Approved for the MICHIGAN STATE HIGHWAY DEPARTMENT, the BOARD OF COUNTY ROAD COMMISSIONERS OF THE COUNTY OF WAYNE, MICHIGAN, the CITY OF DETROIT, THE NEW YORK CENTRAL RAILROAD COMPANY and the MICHIGAN CENTRAL RAILROAD COMPANY and the GRAND TRUNK WESTERN RAILROAD COMPANY as to substance and engineering:

MICHIGAN STATE HIGHWAY DEPARTMENT

By *D. R. Puffer*
Its Bridge Engineer

BOARD OF COUNTY ROAD COMMISSIONERS OF THE COUNTY OF WAYNE, MICHIGAN

By *H. H. Shurtz*
Its Engineer of Bridges and Structures

CITY OF DETROIT

By *Wm. R. Land*
Its Commissioner of Public Works

THE NEW YORK CENTRAL RAILROAD COMPANY
and
THE MICHIGAN CENTRAL RAILROAD COMPANY

By *J. H. Simpson*
Its Chief Engineer

GRAND TRUNK WESTERN RAILROAD COMPANY

By *Wm. R. Land*
Its Chief Engineer

APPROVED AS TO FORM
Walter E. Vashak
acting Corporation Counsel

NEW YORK CENTRAL SYSTEM
M.C.R.R. - BAY CITY BRANCH
N.Y.C.R.R.- DETROIT BRANCH

PROPOSED UNDERPASS GRADE SEPARATION
EDSEL FORD EXPRESSWAY
DETROIT, MICHIGAN

APPROXIMATE ESTIMATE OF COST
RAILROAD FORCE ACCOUNT WORK

Construction Engineering and Inspection

LABOR

Vacation Allowance 3%

\$ 15,000

450

\$ 15,450

R. R. Retirement and
Unemployment 6%
Personal Expense

\$ 927

623

\$ 17,000

TRACK WORK

Temporary Work

Labor - Install, maintain (during use by NYC RR)
and remove rail and fastenings for temporary
trestles, including inner guard rails.

Install, maintain and remove temporary

crossovers and runaround tracks \$ 35,000

Vacation Allowance 3%

1,050

\$ 36,050

R. R. Retirement and
Unemployment 6%

2,163

\$ 38,213.

Material -

| | | | |
|-------------------|-----------|----------|-------|
| Switch 16' 6" | 7 ea. | @ 794.26 | 5,560 |
| Frog, #10 - 127# | 7 " | " 617.05 | 4,319 |
| Guard Rail, 15' | 14 " | " 156.11 | 2,186 |
| " " Bridge 50 G.T | " " | " 62.50 | 3,125 |
| Rail, 127# NTR | 113 " | " 68.75 | 7,769 |
| Angle Bars 127# | 265 Pr. | " 7.46 | 1,977 |
| Bolts | 1,590 Ea. | " 0.21 | 334 |
| Nut Locks | 1,590 " | " 0.12 | 191 |
| Switch Stand | 7 " | " 81.87 | 573 |
| Switch Lamps | 7 " | " 18.44 | 129 |
| Switch Locks | 7 " | " 1.25 | 9 |
| Offset Splice | 22 Pr. | " 14.14 | 311 |
| Plates | 3,900 Ea. | " 1.17 | 4,563 |
| Rail Anchors | 920 " | " 0.375 | 345 |

\$ 31,391

Credit 94%

29,507

\$ 1,884

| | | | | | |
|----------------------------|---------------|-------|----------|--------------|-----------------------|
| Switch Ties | 29 | MMM @ | \$141.50 | \$4,104 | |
| Track Ties | 1,150 | Ea. @ | 4.85 | 5,578 | |
| Track Spikes | 23,000 | Ea. @ | 0.06 | <u>1,380</u> | |
| | | | | 11,062 | |
| Credit 75% | | | | <u>8,296</u> | \$2,766 |
| Stone Ballast | 1,200 Cy. @ | | \$2.00 | <u>2,400</u> | \$7,050 |
| Handling Material | 5% x \$42,453 | | | | 2,123 |
| Transportation of Material | | | | | 2,614 |
| Equipment | | | | | <u>1,500</u> \$51,500 |

PERMANENT WORK

LABOR - Remove and restore tracks including turnouts in construction area. Line and ballast. Install guard rail on permanent structure

| | | | | | |
|-----------------------------------|----|--|--|--------------|--------|
| | | | | \$33,000 | |
| VACATION ALLOWANCE | 3% | | | <u>990</u> | |
| | | | | 33,990 | |
| R. R. RETIREMENT and Unemployment | 6% | | | <u>2,039</u> | 36,029 |

MATERIAL -

| | | | | | |
|---------------|--------------|--|--------|------------|----------|
| Ballast Stone | 1500 Cy. @ | | \$2.00 | \$3,000 | |
| Cross Ties | 1815 Ea. " | | 4.85 | 8,803 | |
| Switch Ties | 26.4 MMM " | | 141.50 | 3,735 | |
| Track Spikes | 20,000 Ea. " | | 0.06 | 1,200 | |
| Track Bolts | 1,400 Ea. " | | 0.21 | 294 | |
| Nut Locks | 1,400 Ea. " | | 0.12 | <u>168</u> | \$17,200 |

SALVAGE -

| | | | | | |
|-----------------------|-------------|--|---------|--------------|---------------------|
| Crossties | 1,815 Ea. @ | | \$ 4.85 | \$8,803 | |
| Switch-ties | 26.4 MMM @ | | 141.50 | <u>3,735</u> | |
| | | | | 12,538 | 10,677 r. |
| Less 15% Service Less | | | | <u>1,861</u> | <u>10,657</u> 6,543 |

| | | | | | |
|----------------------------|---------------|--|--|--|---------------------|
| Handling Material | 5% x \$14,200 | | | | 710 |
| Transportation of Material | | | | | 2,038 |
| Equipment | | | | | <u>1,180</u> 46,500 |

ESTIMATED COST OF TRACK WORK

\$98,000

MAINTAIN TEMPORARY TRETTLES

| | | | | |
|---|------|-------|------------|------------|
| Labor - | | | \$9,000 | |
| Vacation Allowance | 3% | | <u>270</u> | |
| | | | \$9,270 | |
| R. R. Retirement and Unemployment | 6% | | <u>556</u> | \$9,826 |
| Material - | | | | |
| Miscellaneous timber and hardware | | | | 800 |
| Handling Material | 5% x | \$800 | | 40 |
| Transportation of Material | | | | 124 |
| Equipment | | | | <u>210</u> |
| Estimated Cost to Maintain Temporary Trestles | | | | \$11,000 |

PROTECTION OF RAILROAD TRAFFIC

| | | | | |
|---|-------|-------|--------------|-----------|
| Labor - Place, maintain and remove slow boards | | | \$300 | |
| Vacation Allowance | 3% | | <u>9</u> | |
| | | | \$309 | |
| R. R. Retirement and Unemployment | 6% | | <u>19</u> | \$328 |
| Material - | | | | |
| Electric Slow Boards | 6 Ea. | @ | \$100 | 600 |
| Handling Material | 5% x | \$600 | | 30 |
| Transportation of Material | | | | 2 |
| Equipment | | | | <u>10</u> |
| | | | | \$970 |
| Labor - Switch tenders to operate temporary crossovers | | | \$24,000 | |
| Vacation Allowance | 3% | | <u>720</u> | |
| | | | \$24,720 | |
| R. R. Retirement and Unemployment | 6% | | <u>1,483</u> | \$26,203 |
| Material - | | | | |
| Shanty | 3 Ea. | @ | \$100 | \$300 |
| Credit 75% | | | <u>225</u> | |
| | | | 75 | |
| Miscellaneous Fuel, etc. | | | <u>125</u> | \$200 |
| Handling Material | 5% x | \$425 | | 21 |
| Transportation of Material | | | | 1 |
| Equipment | | | | <u>5</u> |
| | | | | 26,430 |
| Estimated cost to protect Railroad Traffic | | | | \$27,400 |

COMMUNICATION LINE CHANGES

Temporary Work

Labor - Install and remove temporary cable (See Plan No. 4704)

\$10,000
300
\$10,300

R. R. Retirement
Unemployment

6%

618 \$10,918

Material -

| | | | | |
|--------------------------|-------|-----|--------|------------|
| Log, Anchor | 6 | Ea. | \$4.00 | \$ 24 |
| Pole, CYP #1 45' | 2 | " " | 66.11 | 132 |
| Pole, CYP #1 40' | 2 | " " | 46.02 | 92 |
| Arresters, Lightning | 250 | " " | 1.20 | 300 |
| Balcony, Pole | 3 | " " | 82.65 | 248 |
| Cable, lead #19 - 26 Pr. | 150 | Ft. | 1.31 | 197 |
| Cable, lead #19 - 19 Pr. | 25 | " " | 0.99 | 25 |
| Crossarm, 10 ft. 10 pin. | 14 | Ea. | 3.79 | 53 |
| Mountain Arrester | 25 | " " | 8.95 | 224 |
| Strand, Steel 3/8" | 500 | Ft. | 0.08 | 40 |
| Wire, #10 Solid | 50 | " " | 0.07 | 4 |
| Wire, #16 Tw. Pr. | 1,000 | " " | 0.04 | 40 |
| Wire, #19 Tw. Pr. | 500 | " " | 0.03 | 15 |
| Compartment Housing 55' | 2 | Ea. | 50.00 | 100 |
| Compartment Housing 47' | 1 | " " | 25.00 | 25 |
| Cable, 50 Pr. U.G. | 1,500 | Ft. | 2.50 | 3,750 |
| Miscellaneous | | | | <u>285</u> |
| | | | | 5,554 |

SALVAGE:

Pole, 45' 2 Ea. \$132
Pole 40' 2 " 92

\$132
92
\$224

Less 15% Service Loss

21 \$191

Cable, 26 Pr. 135 ft. \$177
Cable, 19 Pr. 22 " 22
Mounting Arrester 25 Ea. 224
Cable, 50 Pr. 1000 Ft. 2500

2500
2923

Less 10% Service Loss

292 2,631 2,822Cr. 2,732

Handling Material 5% x

\$ 5,554 278

Transportation of Material

372

Equipment

300 \$14,600

PERMANENT WORK -

Labor - Remove and restore existing
open wire line and aerial cable
(See Plan No. 4704)

\$8,000
240
\$8,240

Vacation Allowance 3%

R. R. Retirement and
Unemployment 6%

696 \$8,736

Material -

| | | | |
|--------------------------|----------|----------|------------|
| Logs, Anchor | 6 Ea | @ \$4.00 | \$ 24 |
| Pole, GXP 35' | 5 " | " 43.43 | 217 |
| Pole, GXP 40' | 7 " | " 46.02 | 322 |
| Pole, GXP 45' | 4 " | " 66.11 | 264 |
| Balcony, "H" Fixture | 2 " | " 80.18 | 160 |
| Cable Lead, 50 Pr. | 500 Ft | " 1.90 | 950 |
| Cable Lead, 26 Pr. | 80 " | " 1.31 | 105 |
| Conduit, Transite 3" | 600 " | " 0.39 | 234 |
| Crossarms, 10 ft. 10 Pin | 34 Ea | " 3.79 | 129 |
| Wire #16 Tw. Pr. | 800 Ft | " 0.04 | 32 |
| Wire #19 Tw. Pr. | 200 " | " 0.03 | 6 |
| Wire #9 Copper Bare | 3 Mi | " 87.05 | 261 |
| Wire, Galv. #8 | 0.5 " | " 61.40 | 31 |
| Wire, Copper tie #9 | 12 lb | " 0.46 | 6 |
| Housing Compartment - 56 | 2 Ea | " 65.00 | 130 |
| Cable, Lead, 30 pr. | 1,200 ft | " 2.00 | 2400 |
| Miscellaneous | | | <u>675</u> |
| | | | 5,946 |

SALVAGE - (Existing Plant)

| | | | |
|----------|-------|-----------|------------|
| Pole 35' | 5 Ea. | @ \$43.43 | \$217 |
| Pole 40' | 5 " | " 46.02 | 230 |
| Pole 45' | 3 " | " 66.11 | 198 |
| Pole 50' | 1 " | " 70.00 | 70 |
| | | | <u>715</u> |

Less 15% Service Loss

715
108
607

Cable, junk 4,000 lb. @ 0.10
Wire copper, junk 800 " " 0.10

400
80 1,087 \$4,859

Handling Material 5% x \$5,946

297

Transportation of Material

380

Equipment

330 \$14,600

Estimated Cost of Communication Line Changes

\$29,200

SIGNAL AND SIGNAL LINE CHANGES

Line Works: Temporary and Permanent Signal Line Work, as shown on Plan No. 4704

| | | | | | |
|--------------------------------------|---------|-------|---------|---------------|-------------------------|
| Temporary Line Work | | | | \$200 | |
| Vacation Allowance | 3% | | | <u>6</u> | |
| | | | | \$206 | |
| Railroad Retirement and Unemployment | 6% | | | <u>12</u> | \$218 |
| Material - | | | | | |
| Crossarm | 4 Ea. | @ | \$3.80 | 15 | |
| Dead end | 16 " | " | 1.00 | 16 | |
| Wire #12 Solid | 0.4 M | " | 30.00 | 12 | |
| Miscellaneous | | | | <u>37</u> | |
| | | | | 80 | |
| SALVAGE - | | | | | |
| Wire Scrap | 6 lb. | @ | 0.10 | <u>1Cr.</u> | 79 |
| Handling Material | 5% x | \$80 | | | 4 |
| Transportation of Material | | | | | 2 |
| Equipment | | | | | <u>27</u> \$330 |
| Permanent Line Work | | | | | |
| Labor - | | | | 1,000 | |
| Vacation Allowance | 3% | | | <u>30</u> | |
| | | | | 1,030 | |
| R. R. Retirement and Unemployment | 6% | | | <u>62</u> | \$1,092 |
| Material - | | | | | |
| Crossarm | 16 Ea. | @ | \$3.80 | 61 | |
| Dead End | 16 " | " | 1.00 | 16 | |
| Wire #12 Solid | 0.4 M | " | 30.00 | 12 | |
| Cable 19s #12 | 0.35" | " | 1175.00 | 411 | |
| Cable Term. Box | 2 Ea. | " | 54.00 | 108 | |
| Cable Post | 2 " | " | 14.00 | 28 | |
| Soil Pipe 3" | 2 " | " | 1.50 | 3 | |
| Wire Line #10 | 9 M | " | 16.80 | 151 | |
| Miscellaneous | | | | <u>180</u> | |
| | | | | 970 | |
| SALVAGE - | | | | | |
| Wire Scrap | 300 lb. | @ | \$0.10 | <u>30 Cr.</u> | 940 |
| Handling Material | 5% x | \$970 | | | 49 |
| Transportation of Material | | | | | 15 |
| Equipment | | | | | <u>104</u> 2200 \$2,530 |

**TRACK CIRCUIT WORK; Temporary and Permanent Switch
circuit controllers, derail, etc., for
temporary and permanent changes, shown on
Plans Nos. 4702 and 4703**

| | | | |
|---|--|--------------|---------|
| Temporary Track Circuits - LABOR - | | \$2,000 | |
| Vacation Allowance 3% | | 60 | |
| | | <u>2,060</u> | |
| R. R. Retirement and Unemployment 6% | | <u>124</u> | \$2,184 |

Material -

| | | | |
|----------------------------|--------|----------|------------|
| Switch Cir. Control (S.H.) | 5 Ea. | @\$35.00 | 175 |
| " " " Rod | 5 " | " 12.00 | 60 |
| Cable Riser Box | 5 " | " 12.00 | 60 |
| Insulated Joint | 16 " | " 22.00 | 352 |
| Cable IC #6 | 0.2 M | " 180.00 | 36 |
| Switch Lamp | 5 Ea | " 12.00 | 60 |
| Pipe Carrier, AAR | 30 " | " 1.50 | 45 |
| " " RACO | 1 " | " 5.00 | 5 |
| Crank | 4 " | " 2.40 | 10 |
| Derail, Hayes | 1 " | " 75.00 | 75 |
| Derail Lamp | 1 " | " 12.00 | 12 |
| Pipe 1" Signal | 200 Ft | " 0.24 | 48 |
| Crank Stand | 4 Ea | " 2.90 | 12 |
| Target Stand | 1 " | " 15.50 | 16 |
| Wire #12 | 0.2 M | " 27.00 | 5 |
| Miscellaneous | | | <u>329</u> |
| | | | 1,300 |

Salvage -

| | | | |
|-------------------------------|--------|-------|--|
| Insulated Joint | 16 Ea. | \$352 | |
| Less 6% Service loss & Insul. | 101 | \$251 | |

| | | | |
|------------------|-------|------------|--|
| Sw. Cir. Control | 5 Ea. | \$175 | |
| Cable Box | 5 " | 60 | |
| Derail | 1 " | 75 | |
| | | <u>310</u> | |

| | | | | |
|-----------------------|-----------|-----|-------|-----|
| Less 10% Service Loss | <u>31</u> | 279 | 530Gr | 770 |
|-----------------------|-----------|-----|-------|-----|

| | | | | |
|----------------------|---|------|--|----|
| Handling Material 5% | x | 1300 | | 65 |
|----------------------|---|------|--|----|

| | | | | |
|----------------------------|--|--|--|----|
| Transportation of Material | | | | 21 |
|----------------------------|--|--|--|----|

| | | | | | |
|-----------|--|--|--|------------|---------|
| Equipment | | | | <u>130</u> | \$3,170 |
|-----------|--|--|--|------------|---------|

Permanent Track Circuits

| | | | |
|-----------------------|--|--------------|--|
| Labor | | \$3,500 | |
| Vacation Allowance 3% | | 105 | |
| | | <u>3,605</u> | |

| | | | |
|---|--|------------|---------|
| R. R. Retirement and Unemployment 6% | | <u>216</u> | \$3,821 |
|---|--|------------|---------|

MATERIAL -

| | | | | |
|---------------------|---------|---|----------|------------|
| Derrail Hayes | 1 Ea. | @ | \$300.00 | \$ 300 |
| Bolt lock Crossover | 1 " | " | 750.00 | 750 |
| Relay Box | 1 " | " | 75.00 | 75 |
| Cable Box | 4 " | " | 54.00 | 216 |
| Concrete Post | 5 " | " | 14.00 | 70 |
| SW. Cir. Control | 7 " | " | 106.00 | 742 |
| " " " Rod. | 7 " | " | 12.00 | 84 |
| Cable 100 #12 | 0.75 M | " | 670.00 | 502 |
| Box Riser | 7 Ea. | " | 12.00 | 84 |
| Bond Rail | 150 Ea. | " | 0.40 | 60 |
| " -41 | 25 " | " | 0.50 | 13 |
| " -44 | 10 " | " | 1.75 | 18 |
| Insulated Joint | 18 " | " | 22.00 | 396 |
| Switch Lamp | 7 " | " | 12.00 | 84 |
| Miscellaneous | | | | <u>206</u> |
| | | | | 3,600 |

SALVAGE -

| | | | |
|-------------------------------|------------|------------|------------------|
| Insulated Joint | \$396 | | |
| Less 6% Service Loss + Insul. | <u>114</u> | 282.00 | |
| Derrail | 1 Ea. | 300 | |
| Bolt locking | 1 " | 750 | |
| Cable Box | 4 " | 216 | |
| SW. Cir. Control | 7 " | 742 | |
| Cable | 0.65 M | <u>435</u> | |
| | | 2443 | |
| Less 10% Service Loss | <u>244</u> | 2,199.00 | 2,481 Cr \$1,119 |

| | | | |
|----------------------------|--------------|------------|--------------|
| Handling Material | 5% x \$3,600 | 180 | |
| Transportation of Material | | 36 | |
| Equipment | | <u>344</u> | <u>5,500</u> |
| | | | \$8,670 |

Estimated Cost of Signal & Signal Line Changes \$11,200

ACCOUNTING

| | | | |
|-----------------------------------|----|------------|-------|
| Labor | | 1,831 | |
| Vacation Allowance | 3% | <u>55</u> | |
| | | 1,886 | |
| R. R. Retirement and Unemployment | 6% | <u>114</u> | 2,000 |

INSURANCE - Workmen's Compensation self-
insurance, public liability and property damage

\$5,800
\$201,600

Estimated sale value of material recovered from
temporary use and not accepted by Railroad for
return to its stock

600 Cr
201,000

Contingencies

21,000

Estimated Cost of Railroad Force Account Work

\$222,000

Office of Chief Engineer
Chicago, Illinois
November 21, 1952

GRAND TRUNK WESTERN RAILROAD COMPANY

Grade Separation carrying the tracks of the Grand Trunk Western Railroad Company over the Edsel Ford Expressway, Detroit, Michigan

Estimated cost of the work to be performed by the Grand Trunk Western Railroad Company on a force account basis (exclusive of the cost of preparation of designs, plans and specifications).

LABOR CHARGES

| | | | |
|---|-----|-----------|---------|
| Unload and load out materials | | \$ 1,150. | |
| Install temporary crossovers | (2) | 2,700. | |
| Install temporary turnout | (1) | 675. | |
| Remove existing crossover | (1) | 400. | |
| Construct temporary runaround tracks | (2) | | |
| 2200 trk. ft. (including ballasting) | | 4,390. | |
| Swing existing mains & connect to temporary runaround tracks (300 trk. ft.) | | 375. | |
| Remove existing main tracks across bridge section 2 tracks 700 trk. ft. | | 455. | |
| Remove sections of E.B. main to install temporary W.B. | | 260. | |
| Replace main tracks across new bridge (including ballasting) | | 1,514. | |
| Replace sections of E.B. main 400 Trk. Ft. | | 750. | |
| Swing both mains back to permanent position | | 375. | |
| Reinstall permanent crossover | (1) | 1,350. | |
| Remove temporary crossovers | (2) | 800. | |
| Remove temporary turnout | (1) | 250. | |
| Remove temporary runaround tracks | | 1,430. | |
| Install guard rails on trestles 1250' total | | 750. | |
| Maintenance of track for one year | | 2,500. | |
| Total Estimated Labor | | 20,124. | |
| Vacation Allowance 3% | | 604. | |
| Workmen's Comp. P/L & P/D Insurance 4.5161 c | | 909. | |
| R.R. Retirement & Unemployment Tax 6% | | 1,207. | 22,844. |

MATERIALS USED IN TEMPORARY TRACKS

| | | | | |
|--|---------------|--------------|----------------|---------|
| Cross ties #3 | 718 Ea. | ● 3.21 Ea. | 2,305. | |
| Switch ties #10-5 sets | 16175 MBM | ● 140.48 M | 2,272. | |
| 100# rail PW 4899 L.F. | 722902 G.T. | ● 25.00 G.T. | 1,823. | |
| 100# rail Scrap 2500 L.F. | 377202 G.T. | ● 10.00 G.T. | 372. | |
| Switchstands Low New | 5 Ea. | ● 70.15 Ea. | 351. | |
| Switch Lamps & Lox New | 5 Ea. | ● 15.90 Ea. | 79. | |
| 100# Switches New | 5 Ea. | ● 328.32 Ea. | 1,642. | |
| 100# Frogs #10 New | 5 Ea. | ● 374.12 Ea. | 1,871. | |
| 100# Guard Rails 9' H.F. New | 10 Ea. | ● 73.30 Ea. | 733. | |
| 100# Angle Bars 239 Pr. | PW172.03 Cwt. | ● 2.76 Cwt. | 475. | |
| 100# Track Bolts 648 New | 13.80 Cwt. | ● 9.94 Cwt. | 137. | |
| 100# " " 308 PW | 6.56 Cwt. | ● 4.97 Cwt. | 33. | |
| 100# Nutlex New | 648 Ea. | ● 0.06 Ea. | 39. | |
| 100# " P.W. | 308 Ea. | ● 0.03 Ea. | 9. | |
| 100# Tie Plates New | 3900 Ea. | ● 0.58 Ea. | 2,262. | |
| Track Spikes New | 145.00 Cwt. | ● 6.47 Cwt. | 938. | |
| | | | <u>15,341.</u> | |
| Handling costs on materials 5% of 15,341. | | | 767. | |
| Pea gravel ballast on runaround tracks 500 tons | | ● 0.45 Ton | 225. | |
| Transportation charges on track materials | 59236 T.M. | ● 0.01 T.M. | 592. | |
| Transportation on Pea Gravel, Oxford to Avery Avenue | 21135 T.M. | ● 0.01 T.M. | 211. | 17,136. |

MATERIALS RELEASED FROM TEMPORARY TRACKS

| | | | | | | |
|---------------------------------------|--------|-----|--------|--------|----------|----------------|
| Cross Ties # 3 | 718 | ● | 3.21 | 2,305. | Less 25% | \$ 1,729. |
| Switch Ties #10 | 16175 | M ● | 140.48 | 2,272. | " 25% | 1,704. |
| 100# Rail P.W. | 72.902 | T ● | 25.00 | 1,823. | " 6% | 1,714. |
| 100# Rail Scrap | 37.202 | T ● | 10.00 | 372. | " 6% | 350. |
| Switch Stands Low | 5 | ● | 70.15 | 351. | " 6% | 330. |
| Switch Lamps & lex | 5 | ● | 15.90 | 79. | " 6% | 74. |
| 100# Switches | 5 | ● | 328.32 | 1,642. | " 6% | 1,543. |
| 100# Frogs | 5 | ● | 374.12 | 1,871. | " 6% | 1,759. |
| 100# Guard Rails | 10 | ● | 73.30 | 733. | " 6% | 689. |
| 100# Angle Bars PW | 172.08 | C ● | 2.76 | 475. | " 6% | 447. |
| 100# Bolts | 13.80 | C ● | 9.94 | 137. | " 6% | 129. |
| 100# Bolts PW | 6.56 | C ● | 4.97 | 33. | " 6% | 31. |
| 100# Nutlox | 648 | ● | 0.06 | 39. | " 6% | 37. |
| 100# Nutlox PW | 308 | ● | 0.03 | 9. | " 6% | 8. |
| 100# Tie Plates | 3900 | ● | 0.58 | 2,262. | " 6% | 2,126. |
| Track Spikes | 145.00 | C ● | 6.47 | 938. | " 25% | 704. |
| | | | | | | <u>13,374.</u> |
| Less transportation of materials | | | | | | |
| Back to Steres 42088 T.M. ● 0.01 T.M. | | | | | | 421. |
| | | | | | | CR. 12,953. |

TRACK MATERIALS USED IN TEMPORARY REMOVAL AND REPLACEMENT OF EXISTING TRACKS

| | | | | | | |
|--|-------|--------|-----------|--|---------------|------|
| #10 Switch Ties 2 Sets | 6470 | MBM ● | 140.48 M | | 909. | |
| # 3 Cree. Cross Ties | 954 | Ea. ● | 3.21 Ea. | | 3,062. | |
| 4800 Track Spikes | 38.00 | Cwt. ● | 6.47 Cwt. | | 246. | |
| | | | | | <u>4,217.</u> | |
| Handling costs on materials 5% of 4,217. | | | | | | 211. |
| 350 Tons "A" Ballast for Bridge Deck | | ● | 1.20 Ton | | 420. | |
| Transportation charges on Track Materials | 34720 | T.M. ● | 0.01 T.M. | | 347. | |
| Transportation charges on Ballast Oxford to Avery Yard | 14795 | T.M. ● | 0.01 T.M. | | 148. | |
| | | | | | <u>5,343.</u> | |

MATERIALS RELEASED

| | | | | | | |
|------------------------|-------|--------|----------|-------|----------|-------------|
| #10 Switch Ties 2 Sets | 6470 | M ● | 140.48 M | 909. | less 15% | 773. |
| # 3 Cross Ties | 954 | Ea. ● | 3.21 Ea | 3062. | " 15% | 2603. |
| 4800 Track Spikes | 38.00 | Cwt. ● | 6.47 Cwt | 246. | " 25% | <u>185.</u> |
| | | | | | | CR 3,561. |

WORK EQUIPMENT EXPENSE

| | | | | |
|----------------|----|--------|-----------|---------------|
| Work Train | 4 | Days ● | 79.41 Day | 318. |
| Barre Crane | 10 | Days ● | 6.19 Day | 62. |
| Camp Cars (20) | 45 | Days ● | 20.32 Day | 914. |
| | | | | <u>1,294.</u> |

TOTAL

Contingencies 10%

Owners Public Liability Insurance 33,113. ● 0.063 C

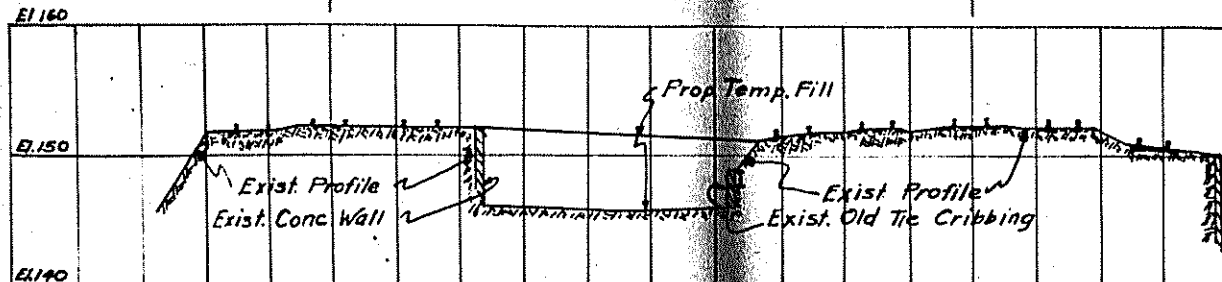
30,103.
3,010.
 33,113.
21.
33,134.

GENERAL EXPENSE

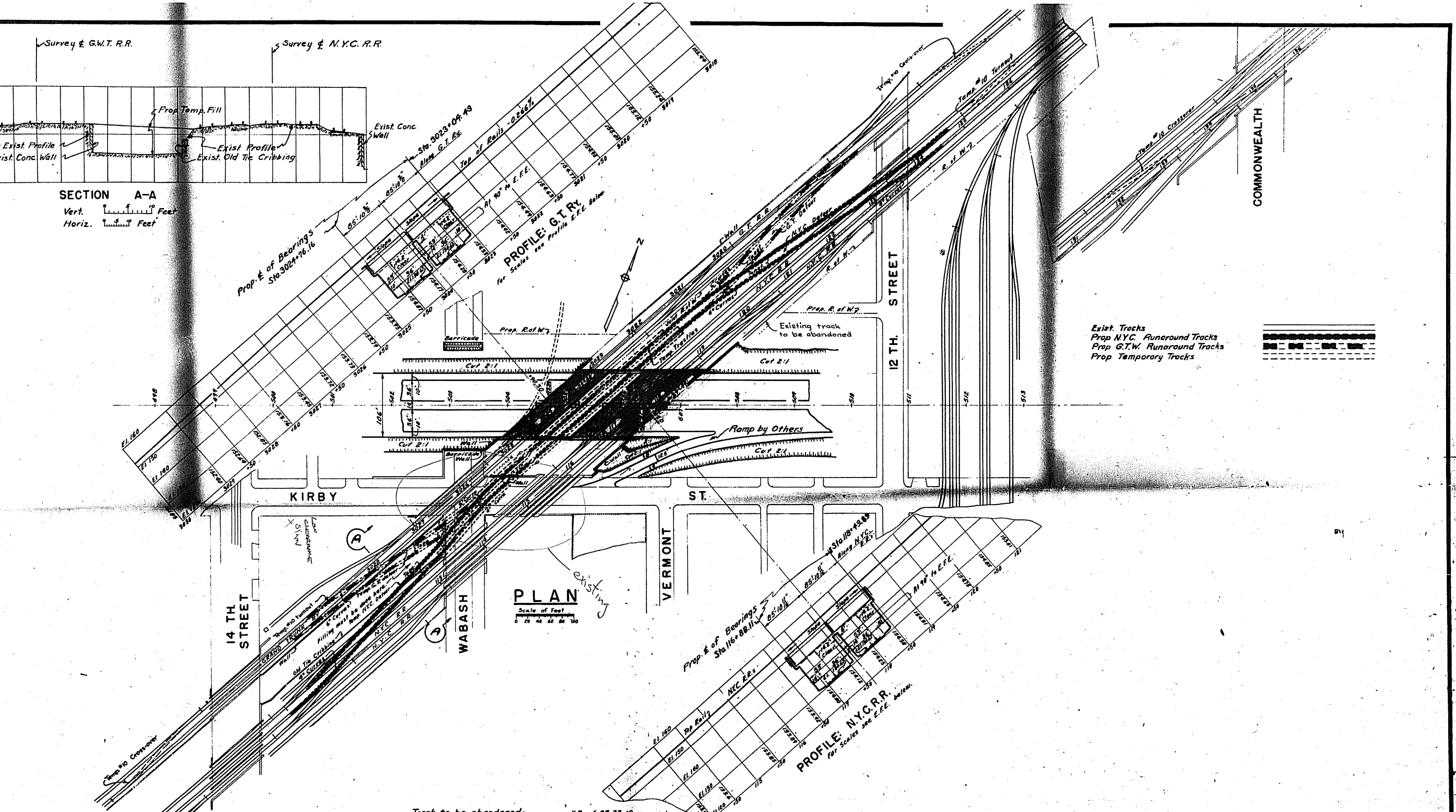
| | | |
|---|-------------|---------------|
| Field Inspection (Salary) | 3,000. | |
| Field Accountant (Salary) | <u>500.</u> | |
| | 3,500. | |
| Vacation Allowance 3% | <u>105.</u> | |
| Insurance 4.5161 C | 158. | |
| R.R. Retirement & Unemployment Tax 6% | <u>210.</u> | |
| | 3,973. | |
| Contingencies 10% | <u>397.</u> | |
| | 4,370. | |
| Owners Public Liability Insurance 0.063 C | <u>20.</u> | <u>4,370.</u> |
| Grand Total of Estimated Expense | | 37,507. |

RECAPITULATION OF TOTAL ESTIMATED COST

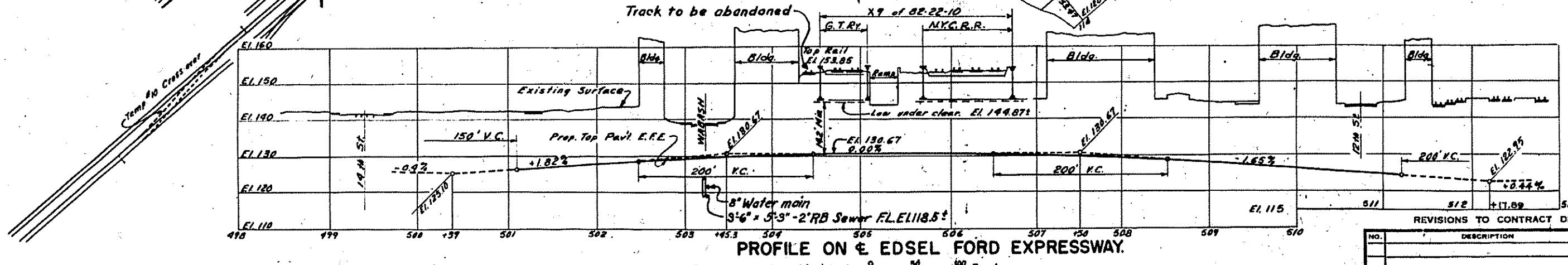
| | |
|----------------------|---------------|
| Labor | \$ 26,817. |
| Material | 22,479. |
| Salvage | Cr 16,514. |
| Equipment | <u>1,294.</u> |
| | 34,076. |
| Contingencies 10% | <u>3,407.</u> |
| | 37,483. |
| Owners P/B Insurance | <u>20.</u> |
| | 37,507. |



SECTION A-A
 Vert. 1" = 10 Feet
 Horiz. 1" = 100 Feet



PLAN
 Scale of Feet
 1" = 100'



PROFILE ON E. EDEL FORD EXPRESSWAY
 Vert. 1" = 10 Feet

Exist. Tracks
 Prop. N.Y.C. Runaround Tracks
 Prop. G.T.W. Runaround Tracks
 Prop. Temporary Tracks

EXHIBIT B

MICHIGAN STATE HIGHWAY DEPARTMENT
 CHARLES M. ZIEGLER
 STATE HIGHWAY COMMISSIONER
GENERAL PLAN OF PROJECT
 PRELIMINARY PLAN "A"

Contracted 4-20-30

| | | |
|------------|----------|---------|
| DRAWN BY | Thatcher | 6-14-27 |
| TRACKED BY | Skinner | 5-1-27 |
| CHECKED BY | R. Boder | 5-6-27 |
| SHEET | 4 | OF 5 |

APPROVED: _____
 CHIEF BRIDGE DRAFTSMAN

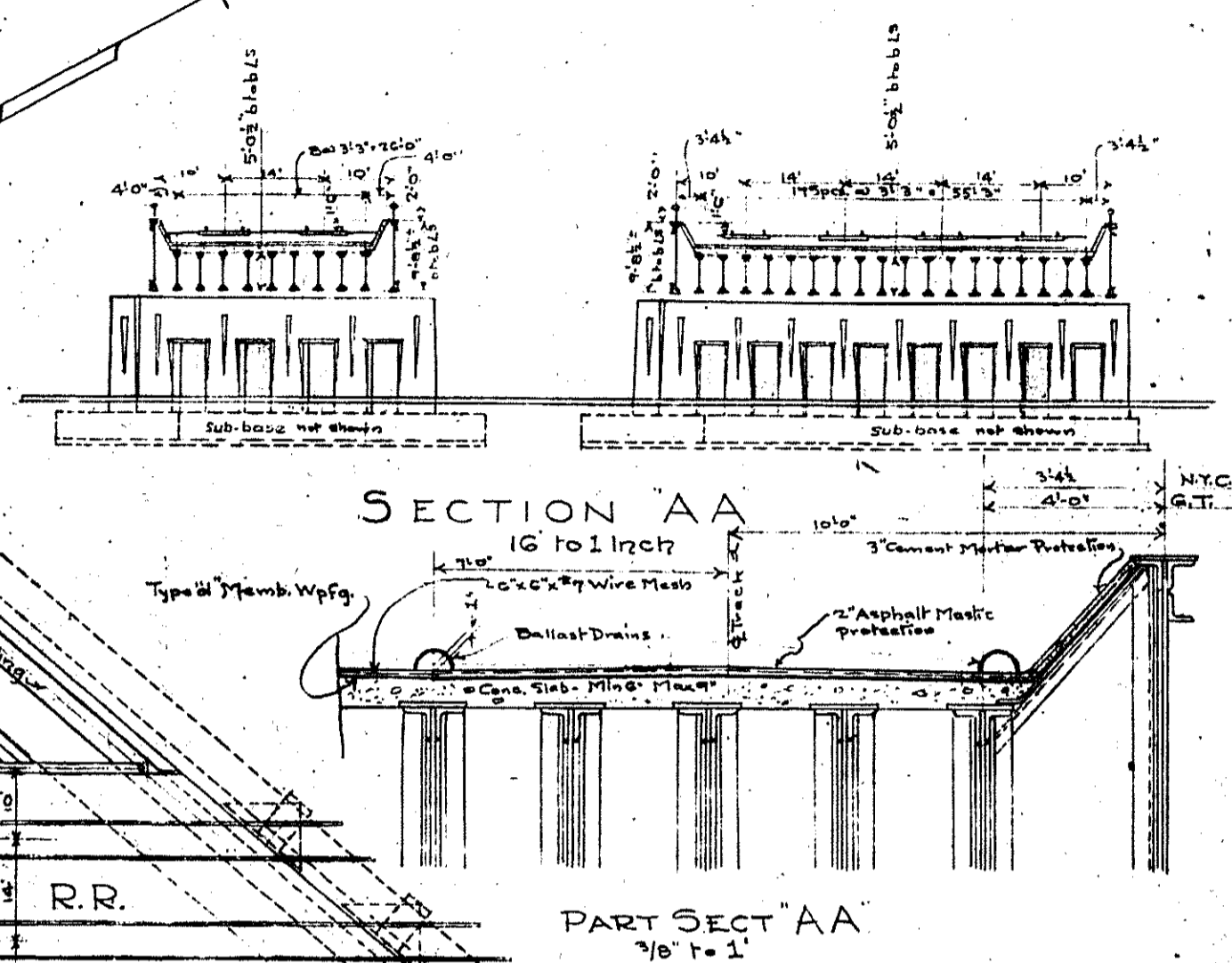
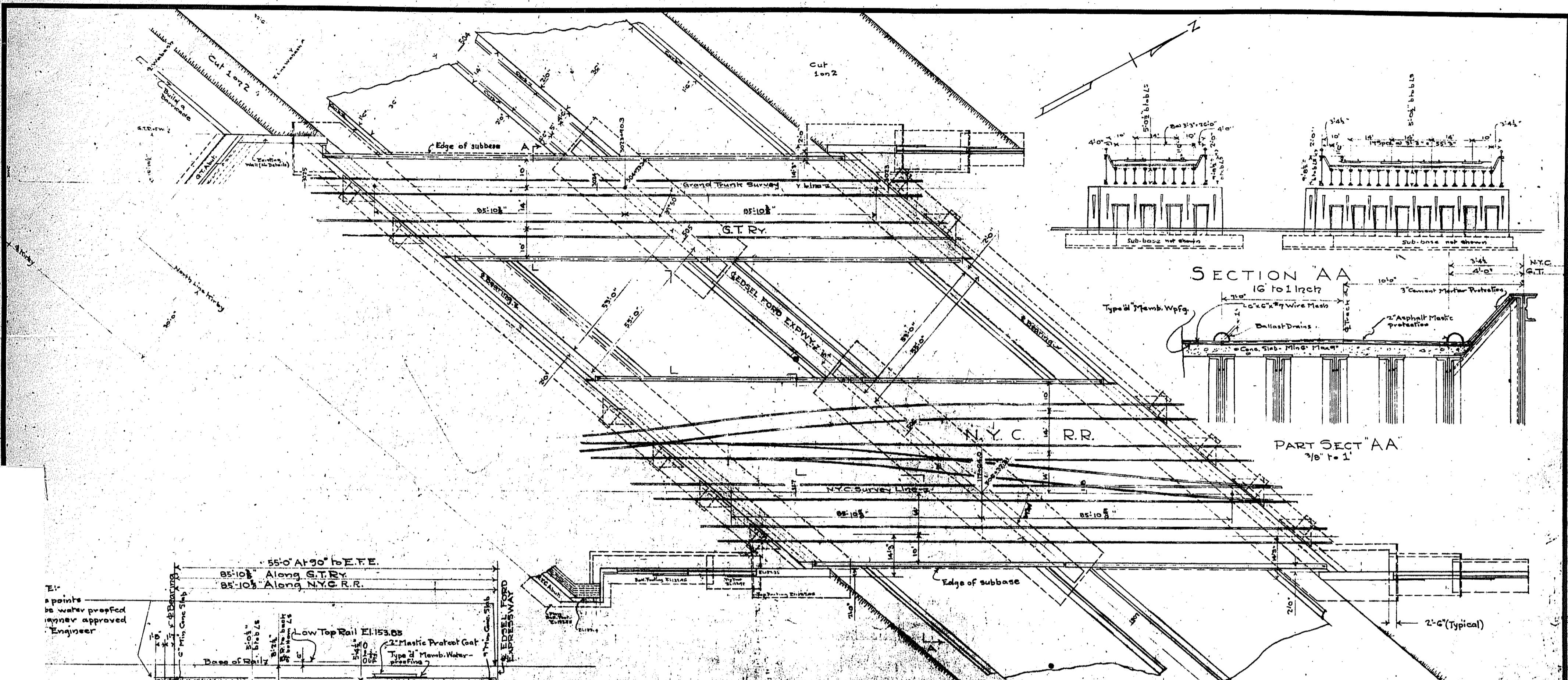
APPROVED: *[Signature]*
 ENGINEER OF BRIDGE DESIGN

REVISIONS TO CONTRACT DRAWINGS

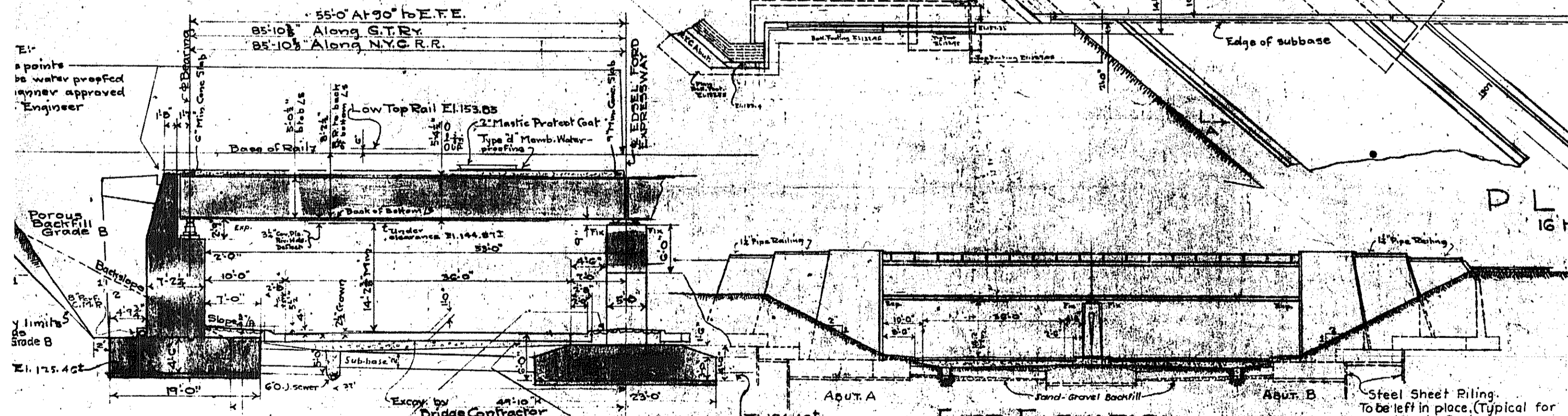
| NO. | DESCRIPTION | DATE | BY |
|-----|-------------|------|----|
| | | | |

X9 of 82-22-10

APPROVED
 MICHIGAN PUBLIC SERVICE COMMISSION
 JUL 6 1933
[Signature]
 STATE HIGHWAY COMMISSIONER



PLAN
1/6 to 1/12 inch



HALF CROSS SECTION
AT RIGHT ANGLES TO E.F.E.
1/8 to 1/12 inch

EAST ELEVATION
AT RIGHT ANGLES TO E.F.E.
1/6 to 1/12 inch

NOTE:
Maximum Foundation Pressure - 4700 $\frac{lb}{sq\ ft}$
Average Foundation Pressure - 4100 $\frac{lb}{sq\ ft}$
Place Porous Backfill Grade B around all open
jointed sewers and perforated pipe. Min. cover of 6."

EXHIBIT C

MICHIGAN STATE HIGHWAY DEPARTMENT
CHARLES M. ZIEGLER
STATE HIGHWAY COMMISSIONER

GENERAL PLAN OF STRUCTURE
PRELIMINARY PLAN A

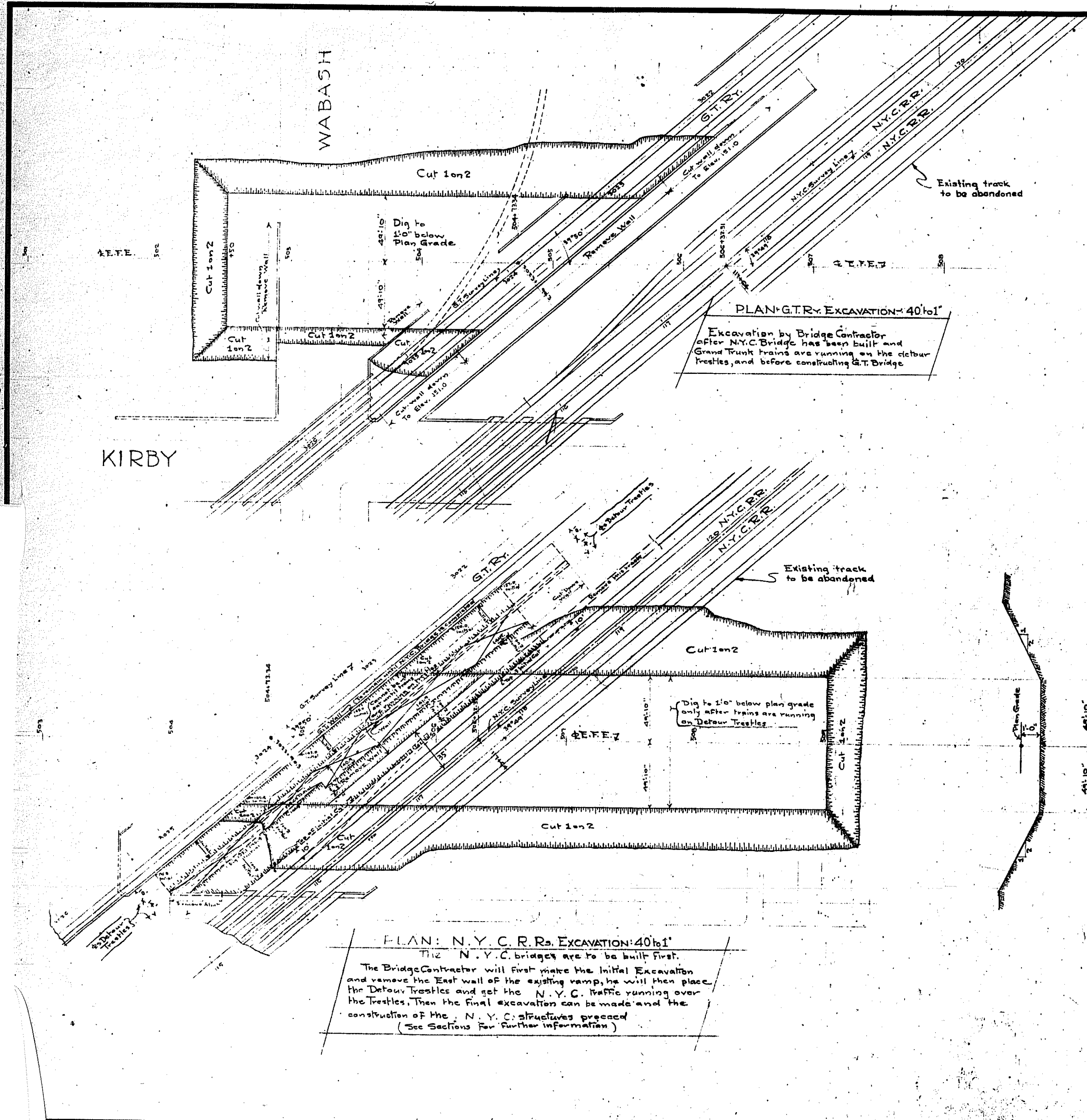
Corrected 4-26-58
DRAWN BY *Trishen L.B. 6-18-47*
CHECKED BY *William 6-18-47*
SHEET 3 OF 5
X9-82-22-10

APPROVED *J.R. Puffer* 6-5-49
APPROVED *J.B. Rickman* 2-2-49

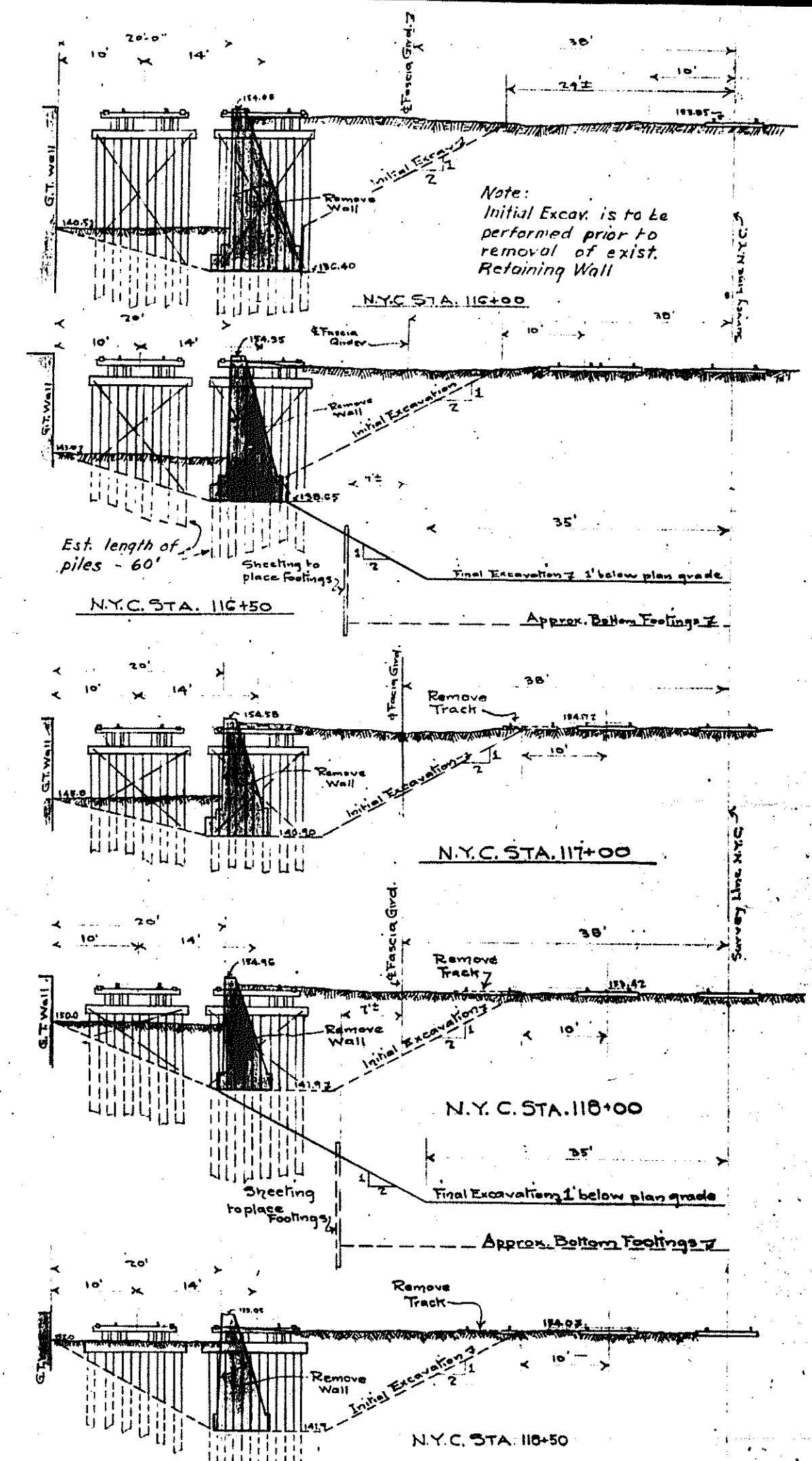
| REVISIONS | | | |
|-----------|-------------|------|----|
| NO. | DESCRIPTION | DATE | BY |
| | | | |
| | | | |
| | | | |

APPROVED
MICHIGAN PUBLIC SERVICE
COMMISSIONER

JUL 6 1953
J.R. Puffer
COMPTROLLER GENERAL



FINAL (As being after initial) GRADING SECT.



SECT'S. OF N.Y.C.R.R.
10' to 1"

EXHIBIT D

MICHIGAN STATE HIGHWAY DEPARTMENT
 CHARLES M. ZIEGLER
 STATE HIGHWAY COMMISSIONER

DIGGING PLAN
 AND
 PART SEQUENCE OF OPERATIONS
 PRELIMINARY PLAN A

Corrected 4-20-50

| NO. | DESCRIPTION | DATE | BY |
|-----|-------------|------|----|
| | | | |
| | | | |
| | | | |

| | |
|---|---|
| APPROVED: <i>L.P. Puffer</i> 8-2-49 CHIEF ENGINEER | APPROVED: <i>L.P. Puffer</i> 8-2-49 ENGINEER OF BRIDGE DEPT. |
|---|---|

| | |
|-------------------------------------|------------------------------------|
| DRAWN BY: <i>Thatcher 4-9-47</i> | TRACED BY: <i>W. J. ... 5-7-47</i> |
| CHECKED BY: <i>W. J. ... 6-4-47</i> | SHEET 4 of 5 |

X9-82-22-10

APPROVED
 MICHIGAN PUBLIC SERVICE
 COMMISSION

JUL 6 1953
J. N. ...
 DIRECTOR PUBLIC SERVICE DIVISION