STATE OF OHIO
DEPARTMENT OF HIGHWAYS

PRE-70-2.47

JEFFERSON & JACKSON TOWNSHIPS
PREBLE COUNTY

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	I-70-1(18)02	

1/62

PREBLE COUNTY
PRE-70-2.47

392 — 3 Plan
I-70-1 (18) 02

"LIMITED ACCESS"
This improvement has been declared a limited access highway or freeway by action of the Director of Highways in accordance with the provisions of Section 5511.02 of the Revised Code of Ohio, and is especially designed for through traffic.

1963 Specifications

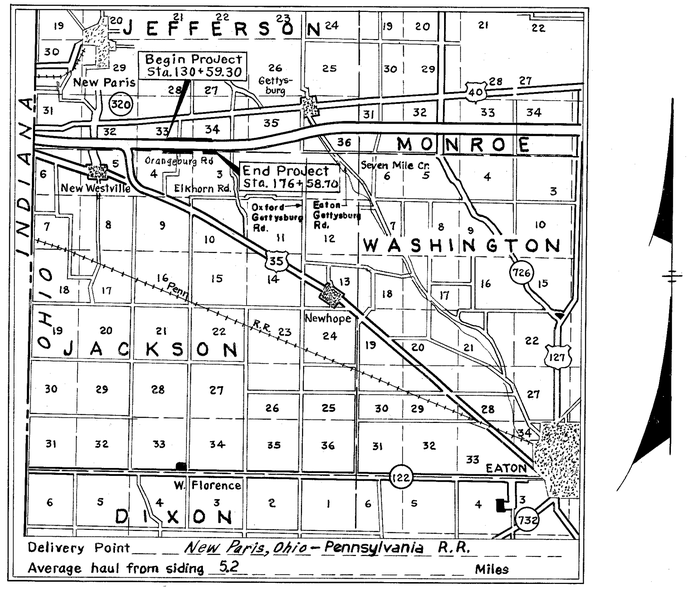
CONVENTIONAL SIGNS

Existing Channal Easement
Existing L/A.
Proposed L/A. — L.A. —
State Line
County Line
Township Line
Section Line
Center Line
Corporation Line
Fence Line
Guard Rail (existing)
Guard Rail (proposed)
Steam Railroad
Power Poles
Telephone Poles
Trees and Stumps
Trees to be removed

INDEX OF SHEETS

Sheet 5/A added to plans
Sheets 1, 1a, & 5a revised 9-29-65 C.E.H.

LINE DATA
Begin Project & Work Sta. 130+59.30
End Project & Work Sta. 176+58.70
Net Length of Project & Work 4,599.40 Lin. Ft. = 0.871 Mile



Delivery Point New Paris, Ohio - Pennsylvania R.R.
Average haul from siding 5.2 Miles

LOCATION MAP

SCALE OF MILES
1 0 1 2 3 4 5

Portion to be improved
State Roads
Other Roads

SCALE

Plan	1" = 50'	0 50
Profile: Horizontal	1" = 50'	0 50
Profile: Vertical	1" = 5'	0 5

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

B-T-70-71	11-15-60	I-8 C.B. No. 5	2-1-63	R/-1	9-1-64
B-T-71 R	3-2-53	I-8 C.B. No. 2, 5 & 6	2-1-63	T.U.	9-12-60
I-12	2-1-63	I-8 I No. 2	2-1-63		
		I-15 No. 1	11-15-60		
F.A.C.I.-1	2-25-64	I-15 No. 2-A	8-17-60	R.R.A. No. 1	2-1-63
F.A.C.I.-2	2-25-64	I-21-23	3-10-64		
G-7.07	4-1-64			RRA No. 2	1-20-58
HW No. 3	8-1-63	L-1	4-1-50	RRA No. 5	11-3-58
HW-E	2-1-63	L-2	4-1-50		
I-8 C.B. No. 6	2-1-63	L-3	4-1-50		
I-1	11-15-60	L-3-A	4-1-50		
		L-4 No. 1	7-1-55		

SUPPLEMENTAL SPECIFICATIONS

I-212	Rev. 6-23-61
I-125	Rev. 6-26-61
L-120	Rev. 1-2-62
T-335	10-28-63
I-127	Rev. 1-15-62
M-107.18	Rev. 4-3-61
M-106.11	1-26-61

The standard specifications of the State of Ohio, Department of Highways, including changes and supplemental specifications listed in the proposal shall govern this improvement.

The right of way for this improvement will be provided by the State of Ohio.

I hereby approve these plans and declare that the making of this improvement will not require the closing of the highway to traffic, and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

Approved J. R. Cooke
Date 12-4-64 Division Deputy Director

Approved J. W. Wilson
Date 3-18-65 Deputy Director of Planning and Programming

Approved T. H. Borrand
Date 2-24-65 Deputy Director of Right of Way

Approved
Date Engineer of Bridges

Approved R. M. Rickett
Date 3-10-65 Engineer of Location and Design

Approved D. E. Shultz
Date 3-10-65 Deputy Director of Design and Construction

Approved
Date First Assistant Director

Approved P. E. Mashuda
Date 3/19/65 Director of Highways

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED

DIVISION ENGINEER DATE

JUN 14 1965

File No.	PREBLE COUNTY	PRE-40-2.47
	Date of Letting	19
	Contract No.	

FED. RD. DIVISION	STATE	PROJECT	
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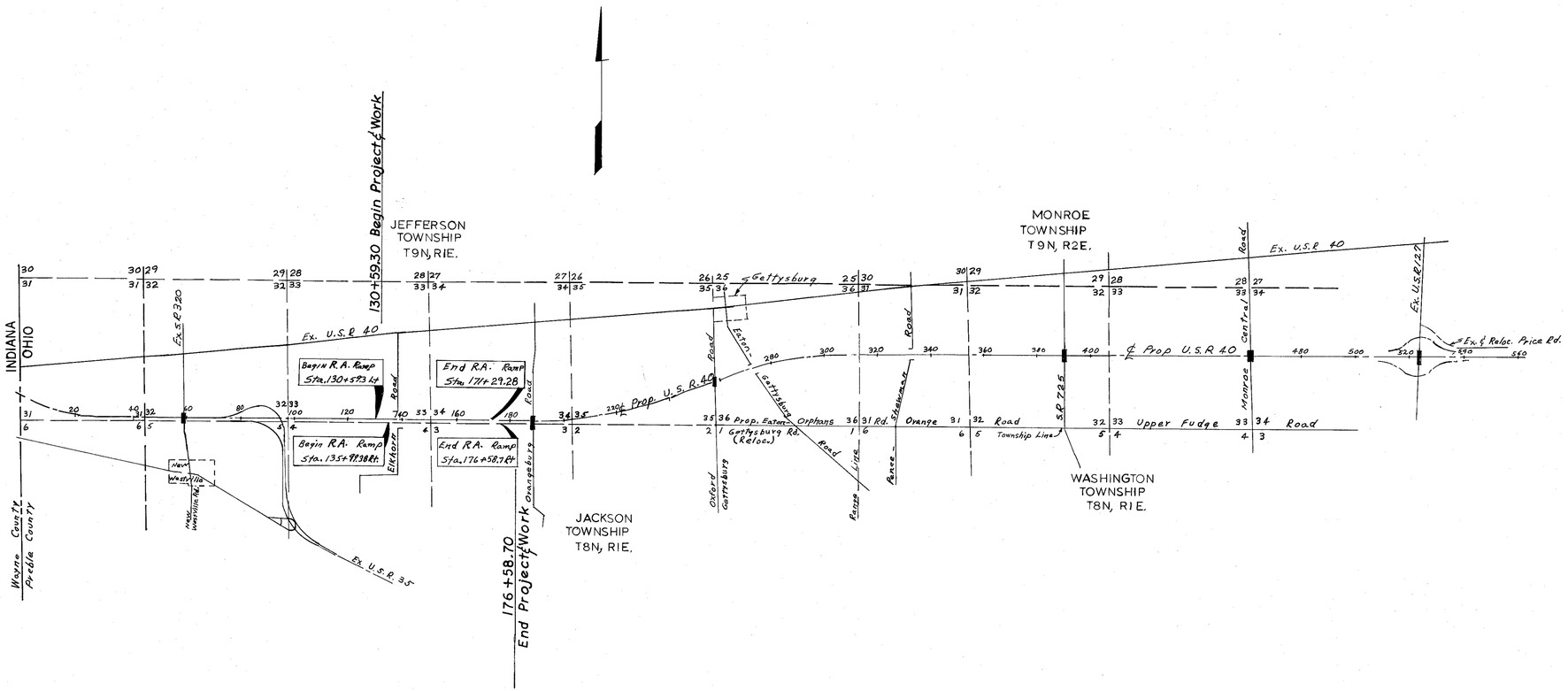
PREBLE COUNTY
PRE-70-247

LOCATION PLAN

0 6 12 24 Stations
Scale



JUN 14 1965

PREBLE COUNTY PRE 70-247 LOCATION PLAN

FED. RD. DIVISION	STATE	PROJECT	
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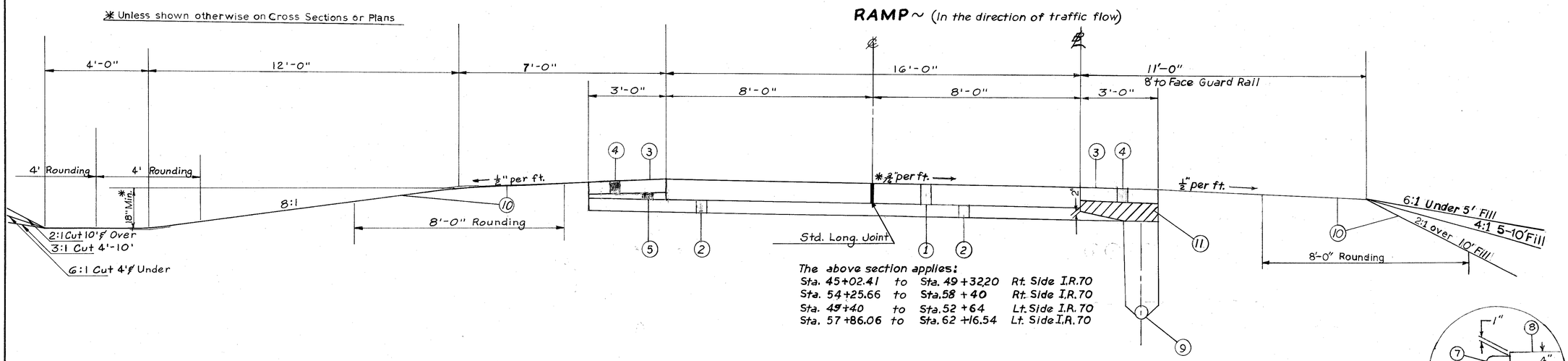
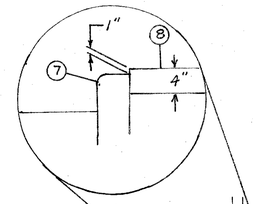
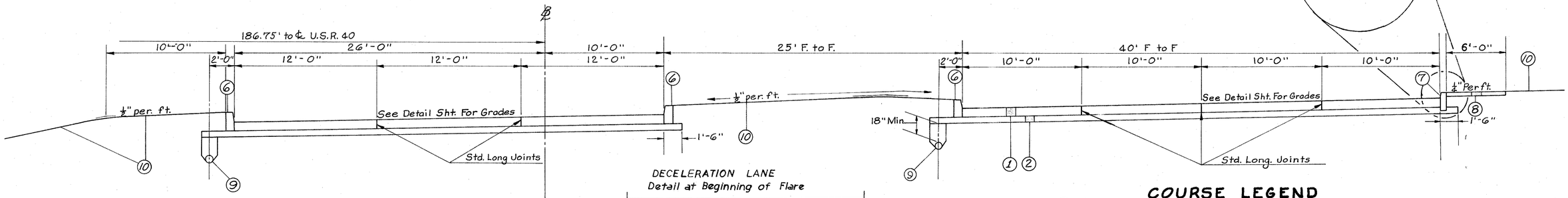
PREBLE COUNTY
PRE-70-247

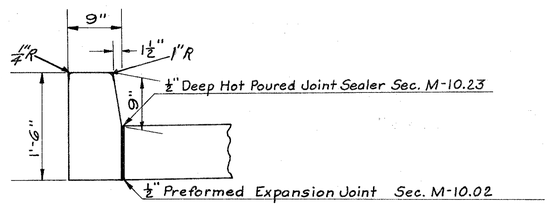
TYPICAL SECTION
TYPE T-71



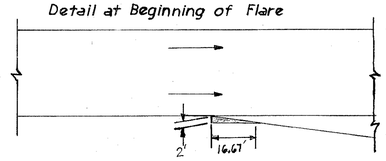


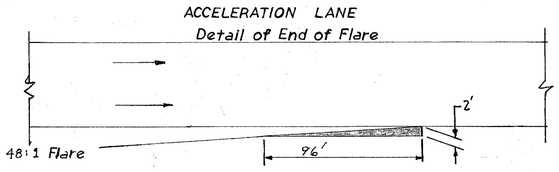
TYPICAL SECTION
ROADSIDE PARK





CONCRETE CURB TYPE 8 - MODIFIED





Shaded area shall be constructed to an elevation one-half inch lower than the adjacent pavment and surfaced with T-31 and No.6 Aggregate. Cost of T-71 shall be paid for as full depth T-71 & Surface Treatment shall be paid for as T-31

COURSE LEGEND

1. Item T-71 9" Reinforced Portland Cement Concrete
2. Item I-22 6" Subbase, Grading "A" or "B" As Per Plan
3. Item T-31 Bituminous Surface Treatment using 0.008 Cu. Yds. of No. 6. Aggregate and 0.25 Gal. of Bituminous Material Per Sq. Yd
4. Item B-21 #6" Waterproofed Aggregate Base Course (T-35 or T-335 Material may be in construction of this course See note in proposal.
5. Item B-19 Aggregate Base Course
6. Item I-12 Concrete Curb Type 8 (Modified)
7. Item I-12 Portland Cement Concrete Curb, Type 6
8. Item I-13 4" Portland Cement Concrete Sidewalk
9. Item I-1 6" Pipe Underdrains, Class I-3
10. Item L-9 Seeding and Protecting
11. Item Special Drainage Connection, using No. 6 aggregate (see Note in Proposal)

Thickness shown is "designed" thickness as described in Section B-21.01.

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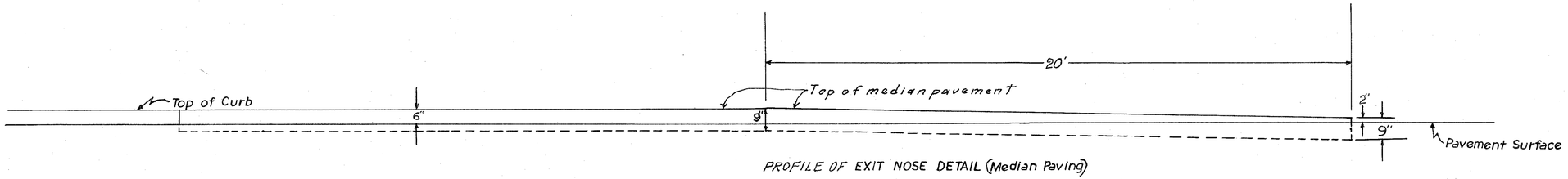
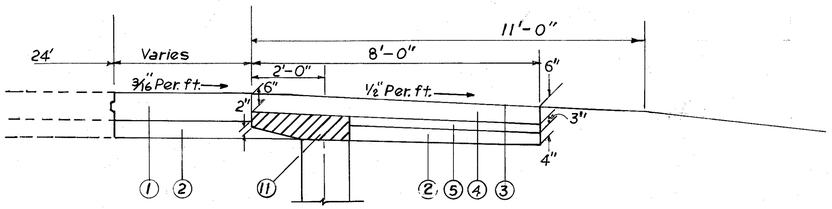
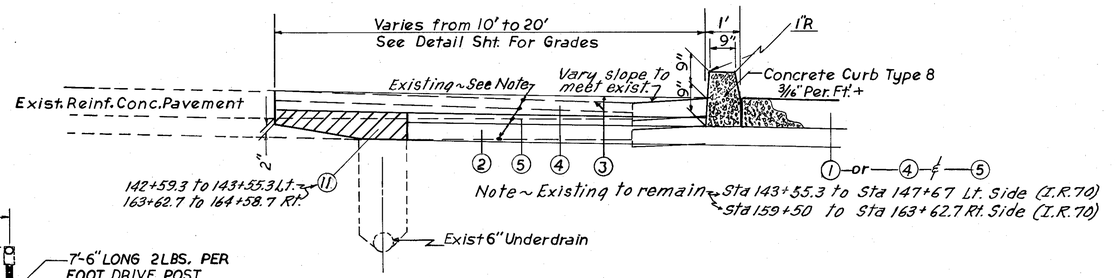


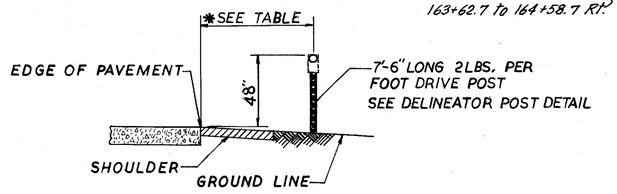
PROFILE OF EXIT NOSE DETAIL (Median Paving)

TYPICAL SECTION ~ SPEED CHANGE LANES.



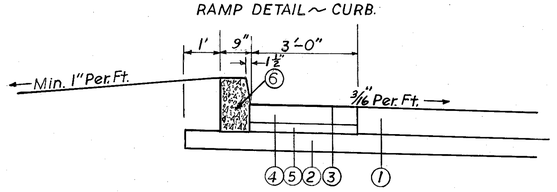
ENTRANCE RAMP ~ DETAIL



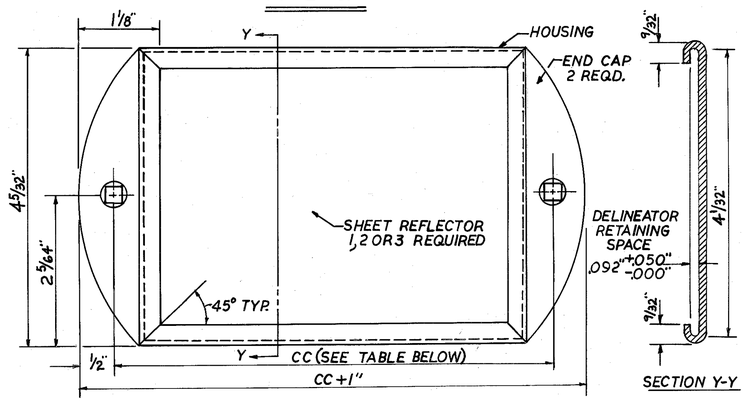


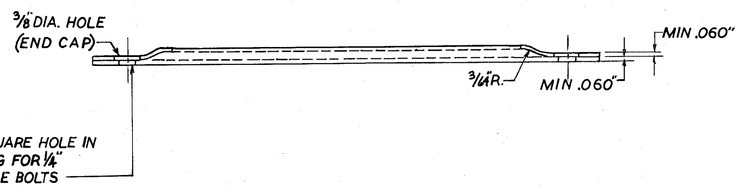
LATERAL PLACEMENT OF DELINEATORS

RAMP DETAIL ~ CURB.

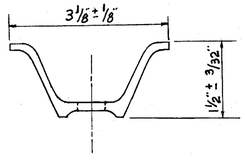


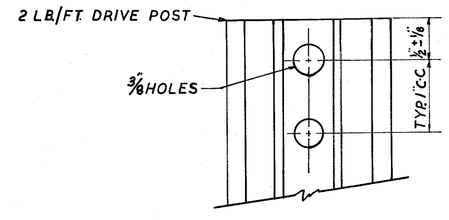
TYPE C.





TYPE	DIM CC
C1-SINGLE WHITE	6"
C2-DOUBLE AMBER	11"
C3-TRIPLE AMBER	16"





DELINEATOR POST

NOTES

1. DELINEATORS SHALL BE FURNISHED AND ERECTED IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION No. I-127, (1-15-62).
2. PAYMENT FOR SUPPORTS (DRIVE POST) SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH FOR "ITEM I-127 DELINEATORS."
3. SEE SHEET Nos. 43 & 44 FOR LOCATION OF TYPE C3 AND TYPE C2 DELINEATORS.

*TABLE

	TYPE DELINEATOR	NO GUARDRAIL	GUARDRAIL
	SINGLE WHITE	12'-6"	6" OUTSIDE
xx	DOUBLE AMBER RIGHT SIDE	10'-6"	6" OUTSIDE
xx	DOUBLE AMBER LEFT SIDE	5'-6"	6" OUTSIDE
	TRIPLE AMBER	12'-6"	6" OUTSIDE

x x This distance shall vary on Speed change lanes to maintain a min. dist. of 2'-6" from edge of paved berm.

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PREBLE COUNTY PRE. 70-247 RAMP DETAIL.

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GENERAL NOTES

ROUNDING OF CORNERS ON CROSS SECTIONS

The rounded corners shown on Standard Drawing RI-1, apply to all cross sections, even though otherwise shown on these plans

UTILITY ADJUSTMENT

Any or all work required for public or private utilities will be done by and at the expense of their respective owners, unless otherwise noted on these plans. See first alignment sheet for utility ownership.

FIELD OFFICE

The Contractor shall, in accordance with Sec. S-0.01, provide, for the exclusive use of the State's employees, a suitable field office having a minimum of 300 sq.ft. of floor space. The Contractor shall have a telephone installed and maintained in this field office during the construction of this project. The Contractor shall also provide and install wiring and outlets suitable for connecting electric lights and office equipment in the field office and provide 110-volts alternating current to the office during the entire period of construction of this project. "All the above is included in the Lump Sum price bid for Field Office."

UNDERGROUND UTILITIES

The location of the underground utilities shown on the plans have been obtained by diligent field checks and searches of available records. It is believed that they are essentially correct, but the State of Ohio makes no guarantees as to their accuracy completeness.

ESTIMATED QUANTITIES

Specific locations and usage of estimated quantities set up for this plan to be used "as directed by the Engineer" shall be made a matter of record by incorporation into the final change order governing completion of this project. Material to be used as directed by the engineer shall not be delivered until requested by the engineer.

CONSTRUCTION LAYOUT STAKES

See note in Proposal describing the work included in this Lump Sum pay item.

REMOVAL OF EXISTING PIPE

The removal of all extisting pipe drains within the limits of proposed excavation items shall be included for payment in the unit price bid for the respective excavation items, unless otherwise itemized in the plans.

SEEDING

Quantities for seeding are calculated for the soil areas between the right of way lines and the outside edge of the paved shoulders of the east and west bound lanes.

REMOVAL OF TREES AND STUMPS

All trees and stumps lying within the construction limits of this project shall be removed under the Lump Sum bid for items E-9, Removal of trees and stumps, except that those trees ..... for which protection and preservation work is indicated in these plans shall not be removed.

The following is an approximate estimate of the number of trees and stumps to be removed.

Sizes	12"to18"	18"to24"	24"to30"	30"to36"	36"to42"
Number Trees	62	21	6	2	3
Number Stumps	10	2	1		

The above estimate is approximate and the State of Ohio reserves the right to order the removal of additional trees or stumps outside of the limits of construction but within the right-of-way and/or easement lines. Payment for the removal of these additional trees or stumps shall be included in the lump sum price bid for Item E-9, Removal of trees and stumps. No trees shall be removed until specifically marked for removal by the Engineer. See note on sheet 6.

PLUGGING PIPE

The upstream ends of all pipes or tile lines intercepted by earthwork operations (and where indicated, the ends of pipe lines to be abandoned in place) shall be effectively blocked and covered. Broken pieces and portions of pipe or tile shall be removed until a whole length is encountered which shall be blocked with concrete, flat stone or brick laid in mortar, or a precast clay or concrete stopper. Payment for the above work shall be included in the unit price bid for Item E-1 Roadway Excavation.

CONNECTIONS TO EXISTING PIPES

At place where the plans provide for proposed drainage pipe to be connected to existing pipes, it shall be the responsibility of the contractor to locate the existing pipe, both as to line and grade before he starts to lay the proposed pipe. The cost of this operation shall be included in the unit price bid for the pertinent pipe item.

SPECIAL DITCHES

For special ditch grades, see cross sections

ELEVATION DATUM

All elevations are based on U.S.G.S. datum.

R/W MONUMENTS, FEDERAL PROJECT MARKERS AND SECTION MARKERS.

Existing R/W monuments, federal project markers and section markers that will be removed by contruction, shall be protected by the contractor as per Section G-7.09 until they can be witnessed and referenced by the contractors forces

EROSION CONTROL

Items 1-10, L-120, and L-10 are provided in these plans for erosion control. Rock of a stable nature will not be removed in order to place any of these items. The engineer shall check and non-perform quantities or adjust locations and quantities for these items where indicated by field conditions during construction.

FIELD DRAINS

All farm tile which are encountered during construction shall be provided with unobstructed outlets under the direction of the engineer. Existing collectors which are located below the roadway ditch elevations and which cross the roadway shall be replace within the right-of-way limits by Item I-1 Class B-1 pipe.
Existing collectors and isolated farm tiles which are encountered above the elevation of the roadway ditches shall be outletted into the roadway ditch. The optimum outlet elevation shall be, if possible, one foot above the flow line elevation of the ditch.
Lateral tile fields which cross the roadway shall be intercepted by class H-2 pipe and carried in a longitudinal direction to an adequate outlet or roadway crossing.

The location, type, size and grade of required replacements shall be determined by the engineer during construction and payment shall be made on final measurement. The following estimated quantitities have been included in the General Summary for the work noted above. No pipe shall be ordered without the consent of the engineer.

I-1	8" class	B-1 Pipe	50 Lin. Ft.
I-1	6" class	H-2 Pipe	50 Lin. Ft.
I-1	8" class	H-2 Pipe	50 Lin. Ft.
I-1	6" class	F-4 Pipe	50 Lin. Ft.
I-1	8" class	F-4 Pipe	50 Lin. Ft.

ITEM I-5 PIPE SPECIALS

Pipe without perforations will be permitted for use on this project for all Item I-5 Pipe Specials.

CONTRACTION AND EXPANSION JOINTS

Although specific locations of certain expansion and contraction joints have been detailed on this plan no waiver of the specifications is intended. Provision of expansion joints at all major structures and the maximum spacing between contraction joints shall in all cases be in accordance with Standard Construction Drawing T.J.

MAINTAINING TRAFFIC

Two-way traffic shall be maintained at all times. The outer ten(10) feet of outside lane in each direction may be temporarily closed to allow abutting work to be completed.

A temporary median cross-over for equipment using T-10 material and not to exceed thirty(30) feet in width will be permitted at Sta. 153+00 during construction of this project. Equipment crossing should be held to a minimum and the contractor shall provide at least one(1) flagman for each traffic lane whenever a crossing is made.

When the crossover is no longer in use it shall be removed and the median restored to its original condition. Item T-10 Traffic compacted surface course, and Item I-4 Calcium chloride shall be applied on the crossover as directed and in the amounts requested by the engineer. (See G.S. for Quants). The hardness and soundness requirements of the specifications shall be waived on all T-10 material used for the crossover. Any damage to the existing paved berms incurred by the contractor during the use of this crossover shall be repaired to the satisfaction of the engineer. Payment for all of the above, including construction, maintenance and subsequent removal of the crossover, except for furnishing and placing traffic compacted surface course Item T-10 and calcium chloride Item I-4, is included in the lump sum bid for Maintaining Traffic, Item I-3.

SEALING OF PIPE JOINTS

Where connections are made between rigid and flexible pipe sections or between sections or between pipe sections of a different kind or type of fabrication, whether required by the plans, arising from permissible use of optional materials or encountered in connection to existing facilities, the joint shall be sealed if sealing is required by the specification, by means of Class "E" concrete collar as per standard drawing 1-1. Payment for sealing as described above shall be included in the unit price bid for pertinent pipe item.

REINFORCED ENDS OF CORRUGATED METAL PIPE

Reinforced ends will be required on all corrugated metal pipe for drain outlets if the pipe ends are unprotected by headwalls, catch basins, or manholes.

FEDERAL AID CONSTRUCTION IDENTIFICATION SIGNS

The contractor shall furnish, erect, maintain and subsequently remove Federal Aid construction identification signs at each of the following locations:

1. Station 130+59.30 on the right
2. Station 176+58.70 on the left

Sign details shall be as specified on Standard Drawing FACI-1, Code M-55(U)-120(2). The signs shall be erected in accordance with standard Drawing "FACI-2". Additional requirements will be in accordance with notes in the proposal.

CENTERLINE REFERENCE MONUMENTS AS PER PLAN

Monuments shall be constructed of Class C concrete, cast-in-place in a circular hole eight(8) inches in diameter and forty-four(44) inches in depth. Top of concrete shall be finished to a depth of two (2) inches below ground level and the upper six (6) inch portion of the concrete shall be formed. One-half (1/2) inch steel rods six(6) inches long shall be embedded in the wet concrete as directed by the Engineer to mark the point.

SEQUENCE OF CONSTRUCTION OPERATIONS (PAVING)

1. Underdrains shall be installed.
2. The subbase shall then be constructed under the concrete pavement areas and extended out to cover the porous backfill for the underdrain or to one foot beyond the pavement where no underdrain is present.
3. Pavement shall then be constructed.
4. Remove subbase and any contaminated backfill over drain and replace (to the extent shown by (11) on typical sections) with No. 6 aggregate.
5. Complete shoulder construction.

ITEM I-22 SUBBASE, GRADING "A" OR "B" AS PER PLAN

Material for this item shall meet the requirements of grading "A" or "B" of Sec. I-22.02, except that for either grading no more than 10% of the material shall pass a No. 200 sieve after all operations of placing and compacting have been completed.

L-9 COMMERCIAL FERTILIZER

All areas to be seeded under Item L-9, or sodded under Item L-10, shall have commercial fertilizer (12-12-12), applied at the rate twenty (20) pounds per 1,000 sq.ft.

AGRICULTURAL LIMING MATERIAL

The location and need for agricultural liming material will be determined by laboratory tests after rough grading have been performed. Quantities of agricultural liming materials as shown on the plans are sufficient for the entire project, but will be non-performed for the areas where tests show that the liming material is not needed. Where used this material shall be applied at the rate of 100 lbs. per 1000 sq.ft.

EROSION PROTECTION AT CULVERTS AND OTHER OUTLETS

Erosion protection such as Sodding, Dumped Rock Channel Protection, etc., where provided in the plan at structures and other pipe outlets, shall be placed immediately after installation of the pipe or structure.

ITEM T-10, AS PER PLAN

The weights to be used in calculating the yardage to be paid for under this item shall, if a standard size coarse aggregate is specified, be the same as those indicated in the Construction and Material Specifications for Crusher run or bank run materials.

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REST AREA - GENERAL NOTES

REST AREA TREE PROTECTION

REST AREAS SHALL NOT BE USED FOR STORAGE OF MATERIALS, PARKING OF EQUIPMENT, OR VEHICLES OR FOR THE LOCATION OF CONSTRUCTION BUILDINGS OF ANY KIND DURING CONSTRUCTION. EQUIPMENT SHALL NOT BE OPERATED OVER TREE ROOT AREAS WHEN THE GROUND IS SOFT THEREBY AVOIDING DEEP, RUTTING, SOIL COMPACTION, AND DESTRUCTION OF ROOT SYSTEMS. TREES THAT ARE TO BE REMOVED WILL BE MARKED. ALL OTHERS SHALL BE Saved. TREES TO BE SAVED THAT ARE DAMAGED BEYOND REPAIR BY DESTRUCTION OF MORE THAN 50 PER CENT OF ROOT AREAS OR 30 PER CENT OF THE CIRCUMFERENCE OF BARK AREAS ON INDIVIDUAL TREES SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. REPLACEMENTS SHALL BE IN QUANTITY SUFFICIENT TO COMPENSATE FOR SHADED AREAS LOST AND SHALL BE COMPLETED AS PER L-16 WITH THE CONTRACTOR FURNISHING AND PLANTING TREES OF THE SIZE AND VARIETY DIRECTED BY THE ENGINEER.

IN LIEU OF "BOXING FOR TREE PROTECTION AS REQUIRED BY G-7, E-1 AND STANDARD DRAWING L-1 SNOW FENCE SHALL BE USED TO PROHIBIT ACCESS TO TREE ROOT AREAS OF INDIVIDUAL TREES AND TREE GROUPS. THE ROOT AREAS ARE EQUAL IN SIZE TO THE SPREAD OF THE TREE BRANCHES.

ITEM L-7 RIPRAP FOR TREE PROTECTION AND ITEM L-8 AGGREGATE FOR TREE ROOT AERATION

REST AREA PARKING LOTS, STRUCTURES AND BOUNDARIES SHALL BE STAKED OUT PRIOR TO REMOVAL OF ANY TREES. AFTER STAKING, ALL TREES TO BE REMOVED SHALL BE MARKED BY THE ENGINEER. WHERE ITEMS L-7 OR L-8 ARE REQUIRED FOR TREES TO BE SAVED, ALL WORK MUST BE DONE AT THE TIME OF EXCAVATING OR FILLING ADJACENT TO SAID TREES. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY, FOR USE AS DIRECTED BY THE ENGINEER. ITEM L-7 50 SQ. YDS. RIP RAP, FOR TREE PROTECTION (THICKNESS 15"). ITEM L-8 25 CU. YDS. AGGREGATE, FOR TREE ROOT AERATION. QUANTITIES CARRIED TO GENERAL SUMMARY SHEET

ITEM L-9 REMOVAL OF TREES AND STUMPS IN REST AREAS

APPROXIMATELY 50 PER CENT OF THE TREES SHALL BE REMOVED. TREES, STUMPS AND CLUMPS OF BRUSH THAT ARE NOT MARKED TO BE REMOVED ARE TO BE SAVED WITHIN THE REST AREAS ONLY THOSE TREES INDICATED BY THE ENGINEER SHALL BE REMOVED. CARE SHALL BE EXERCISED BY THE CONTRACTOR IN PERFORMANCE OF THIS WORK SO THAT NO DAMAGE IS DONE TO TREES INDICATED BY THE ENGINEER TO BE SAVED.

CLEARING AND GRUBBING SHALL BE DONE IN ACCORDANCE WITH SECTION E-1.03 EXCEPT IN AREAS WHERE TREES OR STUMPS ARE TO BE REMOVED WITHIN THE TREE ROOT AREAS OF TREES THAT ARE TO REMAIN. IN SUCH AREAS REMOVAL SHALL BE BY CUTTING TO A MINIMUM DEPTH OF 8 INCHES BELOW FINISH GRADE WITH A STUMP CHIPPER OR SIMILAR EQUIPMENT.

THE LUMP SUM BID FOR ITEM E-9, REMOVAL OF TREES AND STUMPS IN REST AREAS, SHALL CONSTITUTE FULL PAYMENT FOR THIS ITEM.

ITEM L-17 PRUNING EXISTING TREES

ALL TREES WITHIN THE REST AREAS THAT ARE INDICATED TO BE SAVED BY THE ENGINEER SHALL BE PRUNED IN ACCORDANCE WITH ITEM L-17 AND IN ADDITION TO L-17 REQUIREMENTS, LOW LIMBS SHALL BE REMOVED TO OBTAIN SEVEN (7) FOOT CLEARANCE ABOVE THE GROUND AS DIRECTED. THE NUMBER AND SIZE OF TREES TO BE PRUNED MAY BE ESTIMATED FROM INFORMATION SHOWN RELATIVE TO EXISTING TREES AND THE PERCENTAGE TO BE REMOVED.

THE STATE WILL NOT BE RESPONSIBLE FOR ANY VARIATIONS FOUND DURING CONSTRUCTION. THE LUMP SUM BID FOR ITEM L-17, PRUNING EXISTING TREES SHALL CONSTITUTE FULL PAYMENT FOR THIS ITEM AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

ITEM L-6 ROADSIDE CLEANUP MODIFIED

THIS ITEM IS ESTIMATED FOR PERFORMANCE ON ALL EARTH AREAS OUTSIDE THE EXCAVATED OR FILLED AREAS WITHIN THE REST AREAS AS DIRECTED. TREE PRUNING AND REMOVAL OF TREES AND STUMPS WILL BE DONE UNDER OTHER ITEMS. IN ADDITION TO THE SPECIFIED REQUIREMENTS OF L-6 THE FOLLOWING WORK SHALL BE PERFORMED. AREAS OUTSIDE THE TREE ROOT AREAS SHALL BE FITTED AND GRADED TO OBTAIN DRAINAGE AWAY FROM ALL STRUCTURES AND TO PREVENT PONDING AT ANY POINT. ALL ROUGH UNEVEN AREAS INCLUDING FENCE ROWS SHALL BE GRADED TO ELIMINATE HUMPS OR DEPRESSIONS THAT WOULD INTERFERE WITH A 24 INCH MOWER. FENCE SHALL BE REMOVED FROM TREES AND THE TREE TRUNKS REPAIRED. BOULDERS SHALL BE REMOVED AND DISPOSED OF OR BURIED TO A MINIMUM DEPTH OF 2 FEET. STONE PILES SHALL BE REMOVED AND DISPOSED OF OR BURIED TO A MINIMUM DEPTH OF 2 FEET.

THE LUMP SUM BID FOR ITEM L-6, ROADSIDE CLEANUP MODIFIED, SHALL CONSTITUTE FULL PAYMENT FOR THIS ITEM AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

ITEM SPECIAL

PARK TABLES, ROADSIDE TOILET AND STORAGE UNIT, CHARCOAL GRILL AND SERVING TABLE SHALL INCLUDE ALL EXCAVATION AND BACK-FILL, FURNISHING, HAULING AND PLACING ALL MATERIALS AND ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE ITEMS AS DETAILED ON THE PLAN OR AS SHOWN ON THE PERTINENT STANDARD CONSTRUCTION DRAWINGS AND GENERAL NOTES. THEY SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER. SPECIAL: 14 PICNIC TABLES WITH CONCRETE SLAB, LEFT SIDE. SPECIAL: 14 PICNIC TABLES WITH CONCRETE SLAB, RIGHT SIDE. SPECIAL: 5 CHARCOAL GRILL AND SERVING TABLE, LEFT SIDE. SPECIAL: 5 CHARCOAL GRILL AND SERVING TABLE, RIGHT SIDE. QUANTITIES CARRIED TO GENERAL SUMMARY SHEET

ITEM L-9 SEEDING AND PROTECTING REST AREAS

THE SEED BED SHALL BE PREPARED TO PROVIDE A SMOOTH SURFACE FOR A GOOD LAWN. FINE GRADING IS TO ELIMINATE HUMPS OR DEPRESSIONS THAT WOULD INTERFERE WITH MOWING WITH A 24 INCH MOWER. ALL STONE AND DEBRIS LARGER THAN 1 INCH IN DIAMETER SHALL BE REMOVED FROM THE SURFACE AND THE AREAS SHALL BE LOOSENED TO A DEPTH OF 2 INCHES BEFORE SEEDING.

TOP SOIL SALVAGED AS PER E1.03(a) SHALL BE USED IN FINISH GRADING OVER THE TREE ROOT AREAS TO AVOID DAMAGE BY GRADING OR TILLAGE EQUIPMENT. IT SHALL BE USED AS DIRECTED TO FILL DEPRESSIONS TO OBTAIN EXTRA SMOOTH FINE GRADING AND TO PROVIDE A MINIMUM DEPTH OF 3 INCHES OF TOPSOIL FOR THE REST AREA LAWNS. WHERE IT IS NOT NECESSARY TO CHANGE GRADES, TOPSOIL PLACEMENT WILL NOT BE REQUIRED. PLACING TOPSOIL WILL BE PAID FOR UNDER ITEM E-1 ROADWAY EXCAVATION

SEED MIXTURE FOR REST AREAS AND BETWEEN HIGHWAY AND REST AREA RAMPS SHALL BE AS FOLLOWS:

45 PER CENT PENNLAWN FESCUE

40 PER CENT KENTUCKY BLUEGRASS

15 PER CENT RED TOP

REST AREA SEEDING MUST BE DONE WITH A CYCLONE SEEDER WHICH HAS BEEN CLEANED OF ALL OTHER SEED.

PLACING STOCKPILED TOPSOIL PER E-1.05(c)

THE TOPSOIL SHALL BE PLACED TO A DEPTH OF 3 INCHES ON ALL AREAS WHERE GRADING IS REQUIRED IN REST AREAS AS SHOWN ON THE CROSS SECTIONS AND BY THE CONTOUR ON THE PLANS. IT SHALL BE PLACED AT VARIABLE DEPTHS NECESSARY TO OBTAIN SMOOTH GRADES OVER THE TREE ROOT AREAS AND AREAS WHERE TREES, STUMPS, BOULDERS AND STONE PILES ARE REMOVED. MAXIMUM DEPTH OVER TREE ROOT AREAS SHALL BE 3 INCHES. FERTILIZER FOR THIS ITEM IS INCLUDED IN L-9 QUANTITIES.

TOPSOIL FOR "L" ITEMS

THIS SHALL BE OBTAINED FROM STOCKPILES PROVIDED BY L-1, AND ITEM L-13: AREAS INDICATED ON THE PLANS FOR THESE ITEMS SHALL BE PREPARED AS PLANTING BEDS, EXCAVATED TO A DEPTH OF 12 INCHES AND BACK-FILLED WITH A MIXTURE OF 1/3 TOPSOIL, 1/3 SAND, AND 1/3 PEAT MOSS. THIS MIXTURE SHALL BE USED FOR L-14 ITEM ALSO.

ITEM L-13 PLANTING SHRUBS

SHRUBS SHALL BE PLANTED IN A CONTINUOUS BED IN LIEU OF INDIVIDUAL POCKET HOLES. A SINGLE ROW OF SHRUBS SHALL BE PLANTED IN A BED 24 INCHES IN WIDTH AND 18 INCHES IN DEPTH.

ITEM L-13 AND L-14 MULCHING

THE MULCHING MATERIAL (GROUND CORN COBS, SHREDDED BARK, WOOD CHIPS, SHREDDED BARK WITH GROUND WOOD OR PEAT MOSS) SHALL BE PLACED BETWEEN AND AROUND THE PLANTS WITHIN 24 HOURS AFTER ANY PLANTING AND SHALL BE APPLIED UNIFORMLY TO COVER THE PLANTING AREA TO A DEPTH OF 3 INCHES FOR PEAT MOSS AND 4 INCHES FOR OTHER MULCHING MATERIALS, LOOSE MEASUREMENT. THE MULCH SHALL BE SPREAD TO COVER THE PLANTING BED AND AN AREA 6 INCHES OUTSIDE THE PERIPHERY OF THE PLANTING BED. THE COST OF ALL MULCHING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM L-13 AND L-14.

SPECIFICATIONS FOR MULCHING MATERIALS

SHREDDED BARK OR SHREDDED BARK WITH GROUND WOOD MUST PASS A 3/4 INCH SIEVE

GROUND CORN COBS MUST PASS A 3/4 INCH SIEVE.

WOOD CHIPS SHALL BE A COMBINATION OF WOOD SLIVERS WITH GROUND WOOD OR SAWDUST. AT LEAST 50 PER CENT BY WEIGHT OF THE MATERIAL SHALL PASS THROUGH A 3/4 INCH SIEVE WITH NONE OF THE CHIPS HAVING A LENGTH OF MORE THAN 6 INCHES.

PLANTING DATES

THE ACTUAL OPERATION OF PLANTING ITEMS L-13, L-14 AND SHALL NOT BE PERFORMED BETWEEN THE DATES OF MAY 1ST. AND OCTOBER 1ST.

PRESSURE WATER SYSTEM

METHOD OF MEASUREMENT: THE "ITEM SPECIAL PRESSURE WATER SYSTEM" AND ALL APPURTENANCES AS DETAILED AND SPECIFIED ON THE PLANS SHALL BE CONSIDERED AS ONE UNIT. THE NUMBER OF UNITS TO BE PAID FOR SHALL BE THE NUMBER OF EACH UNIT, LISTED AND ESTIMATED SEPARATELY, COMPLETE AND ACCEPTED. BASIS OF PAYMENT: THE WORK INCLUDED IN THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR EACH "ITEM SPECIAL, PRESSURE WATER SYSTEM" COMPLETED AND ACCEPTED, WHICH PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING, PREPARING, PLACING AND INSTALLING ALL MATERIALS, AND FOR ALL MATERIALS, AND ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM AS SHOWN AND SPECIFIED ON THE PLANS.

SEWAGE CHLORINATION UNIT

METHOD OF MEASUREMENT: THE "ITEM SPECIAL, SEWAGE CHLORINATION UNIT" AND ALL APPURTENANCES AS DETAILED AND SPECIFIED ON THE PLANS SHALL BE CONSIDERED AS ONE UNIT. THE NUMBER OF UNITS TO BE PAID FOR SHALL BE THE NUMBER OF EACH UNIT, LISTED AND ESTIMATED SEPARATELY, COMPLETE AND ACCEPTED.

BASIS OF PAYMENT: THE WORK INCLUDED IN THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR EACH "ITEM SPECIAL, SEWAGE CHLORINATION UNIT" COMPLETE AND ACCEPTED, WHICH PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING, PREPARING, PLACING AND INSTALLING ALL MATERIALS AND FOR ALL MATERIALS, AND LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM AS SHOWN AND SPECIFIED ON THE PLANS.

AEROBIC SEWAGE TREATMENT PLANT: SEE DETAILS ON PLANS AND TRASH TRAP

METHOD OF MEASUREMENT AND TRASH TRAP

THE AEROBIC SEWAGE TREATMENT PLANT AND ALL APPURTENANCES AS DETAILED AND SPECIFIED ON THE PLANS SHALL BE CONSIDERED AS ONE UNIT. THE NUMBER OF UNITS TO BE PAID FOR SHALL BE THE NUMBER OF EACH UNIT, LISTED AND ESTIMATED SEPARATELY, COMPLETE AND ACCEPTED.

BASIS OF PAYMENT AND TRASH TRAP

THE WORK INCLUDED IN THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR EACH ITEM SPECIAL, AEROBIC SEWAGE TREATMENT PLANT COMPLETED AND ACCEPTED, WHICH PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR ALL EXCAVATION AND BACK-FILL AND FOR FURNISHING, HAULING AND PLACING ALL MATERIALS, AND FOR ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM.

BITUMINOUS JOINTS

BITUMINOUS JOINTS FOR SEWERS (SANITARY) AS CALLED FOR IN THESE PLANS SHALL BE BITUMINOUS COMPRESSION TYPE SUCH AS SLIP SEAL OR AN APPROVED EQUAL.

GALVANIZED PIPE

2" & 2½" GALVANIZED PIPE CALLED FOR ON THIS PLAN SHALL MEET THE REQUIREMENTS OF SEC. M-6.9 AND SEC. M-7.4 (A) OF THE SPECIFICATIONS.

GENERAL NOTES CONCERNING THE BUILDINGS

THE BUILDINGS ARE TO BE CONSTRUCTED AT THE LOCATIONS AND ELEVATIONS SHOWN ON THE PLANS. EXCAVATING AND BACKFILLING SHALL BE AS SPECIFIED UNDER E-1. AGGREGATE FOR SUBGRADE UNDER FLOORS SHALL BE AS SPECIFIED UNDER B-19.

- CONCRETE WORK -

CONCRETE WORK

NOTE: "A" THE CONTRACTOR FOR THIS WORK IS REFERRED TO INSTRUCTIONS TO BIDDERS AND GENERAL CONDITIONS AS A PART OF THIS CONTRACT.

1. EXTENT OF WORK

(A) THIS CONTRACTOR SHALL FURNISH ALL EQUIPMENT, MATERIAL, LABOR AND SERVICES NECESSARY TO FORM, PLACE, FINISH AND CURE ALL PLAIN AND REINFORCED CONCRETE REQUIRED FOR THE COMPLETION OF THE BUILDING, AS SHOWN ON THE PLANS AND AS HEREINAFTER SPECIFIED. DRIVES ARE NOT INCLUDED IN THIS WORK.

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CONCRETE WORK (CONTINUED)

2. GENERAL

A. ALL CONCRETE CONSTRUCTION, EXCEPT WHERE OTHERWISE SPECIFIED HEREINAFTER, SHALL BE CLASS "C" ITEM S-1

B. CONCRETE MAY BE EITHER READY-MIXED OR JOB-MIXED. ALL READY-MIXED CONCRETE SHALL BE IN STRICT ACCORDANCE WITH SPECIFICATIONS FOR CLASS "C" CONCRETE EXCEPT AS HEREINAFTER MODIFIED AND SPECIFIED.

C. NO CONCRETE SHALL BE PLACED BEFORE CONDUITS, SLEEVES, INSERTS, ETC. ARE IN PLACE TO THE SATISFACTION OF THE ENGINEER OR BEFORE FORMS, REINFORCING AND AFFECTED WORK OF OTHER TRADES HAVE BEEN APPROVED BY THE ENGINEER.

3. MATERIALS

A. MATERIALS SHALL BE IN ACCORDANCE WITH ITEM S-1 CONCRETE FOR STRUCTURES.

B. FABRICATED STEEL REINFORCEMENT SHALL MEET THE REQUIREMENTS OF TYPE "A" MESH, SEC. M-7.15.

4. REINFORCEMENT

A. FLOOR SLABS SHALL BE REINFORCED THROUGHOUT WITH TYPE "B" BAR MATS OR TYPE "A" MESH, SEC. M-7.15. ADJACENT SHEETS SHALL BE LAPPED AT LEAST 6", SIDES AND ENDS, WITH LAPPED EDGES SECURELY WIRED OR CLIPPED TOGETHER ON NOT OVER 48" CENTERS. FABRIC SHALL BE BROUGHT INTO POSITION IN APPROXIMATELY THE CENTER OF THE SLAB THICKNESS, AS CONCRETE IS PLACED.

B. FOOTINGS SHALL BE REINFORCED THROUGHOUT AND CONTINUOUS WITH TWO (2) NO. 5 BARS PLACED 4" UP FROM BOTTOM AND 3" IN FROM EACH SIDE.

C. OIL, SCALE, RUST, DIRT, OR OTHER COATINGS THAT WOULD DESTROY OR REDUCE THE BOND SHALL BE REMOVED.

5. CONSTRUCTION JOINTS

A. ALL FLOOR SLAB SECTIONS SHALL BE COMPLETED IN ONE POUR.

B. IF AN EMERGENCY JOINT MUST BE MADE, IT SHALL BE KEYED AND DOWELLED TO THE SATISFACTION OF THE ENGINEER. IMMEDIATELY PRIOR TO RESUMING POURING, THE JOINT SURFACE OF CONCRETE IN PLACE SHALL BE CLEANED OF ALL SOIL AND LAITANCE, THOROUGHLY WETTED AND SLUSHED WITH A COAT OF NEAT-CEMENT GROUT.

6. FLOOR SLABS, PLATFORMS, ETC.

A. CONCRETE FLOOR SLABS AND EXTERIOR APRON AND PLATFORM SHALL BE OF THICKNESS SHOWN ON DRAWINGS AND REINFORCED AS SPECIFIED OR NOTED ON DRAWINGS.

B. INTERIOR SLABS SHALL BE PLACED ON POROUS FILL AS PROVIDED FOR UNDER "GENERAL" HEADING. FILL SHALL BE THOROUGHLY SOAKED WITH WATER AND RECOMPACTED AND RE-SHAPED AS MAY BE REQUIRED IMMEDIATELY BEFORE CONCRETE IS POURED.

7. FINISHING CONCRETE

A. FLOOR SHALL BE FINISHED INTEGRALLY BY SCREEDING, FLOATING AND STEEL TROWELING. THE FRESH CONCRETE SHALL BE SCREEDED AND FLOATED WITH WOOD FLOATS OR MECHANICAL FLOATING MACHINES TO TRUE AND EVEN SURFACES AT THE REQUIRED FINISH LEVELS AND UNTIL ONLY ENOUGH MORTAR FOR TROWELING IS BROUGHT TO THE SURFACE. TROWELING SHALL NOT BEGIN UNTIL ALL WATER AND WATER SHEEN HAVE DISAPPEARED FROM THE SURFACE. WATER RISING TO THE SURFACE SHALL BE REMOVED IN A MANNER APPROVED BY THE ENGINEER. NO SAND-CEMENT DUST COAT SHALL BE USED. THE FINISHED SURFACES SHALL BE SMOOTH, EVEN AND FREE FROM BLEMISHES OF ANY KIND. FINISH THE TOP OF DOOR SILLS WITH FLOOR.

B. EXTERIOR APRON AND PLATFORM SHALL BE FINISHED SMOOTH AND EVEN WITH WOOD FLOATS AND WITHOUT THE USE OF SAND-CEMENT DUST COAT.

8. PATCHING

A. ALL NECESSARY PATCHING OF CONCRETE SHALL BE DONE AFTER OTHER CONTRACTORS' WORK IS IN PLACE. POINT CAREFULLY AROUND ALL PIPING ETC.

9. VAPOR BARRIER

A. PROVIDE A ONE (1) INCH THICK SAND CUSHION AND CONTINUOUS MOISTURE VAPOR BARRIER UNDER THE FLOOR SLAB.

CONCRETE WORK (CONTINUED)

9. VAPOR BARRIER (CONTINUED)

B. MOISTURE-VAPOR BARRIER TO BE 6 MIL (.006") THICK PURE POLYETHYLENE PLASTIC FILM, AS MADE BY MEADOWS, SISALCRAFT, VISKING, WASCO OR EQUAL; OR A POLYETHYLENE-FACED LAMINATE EQUAL TO "MOISTOP" BY AMERICAN SISALCRAFT CORPORATION. USE WIDEST PRACTICAL WIDTH, LAP AT LEAST SIX (6) INCHES AT JOINTS, AND SEAL.

10. PERIMETER INSULATION

A. PRIOR TO FINAL SHAPING AND COMPACTION OF EARTH SUBGRADES INSIDE THE BUILDING, INSTALL VERTICAL AND HORIZONTAL PERIMETER INSULATION CONTINUOUSLY AROUND THE EXTERIOR WALLS, AS INDICATED ON THE DRAWINGS AND HEREIN SPECIFIED.

B. MATERIAL TO BE ONE (1) INCH THICK "STYROFOAM" 22 OR "SCORBORD", RIGID PLASTIC INSULATION INSULATING BOARD BY DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN.

11. WELL PIT, MANHOLE COVER AND FRAME

A. PROVIDE AND INSTALL CAST IRON MANHOLE COVER AND FRAME OVER WELL PIT. (SEE DRAWING)

B. MANHOLE FRAME AND COVER TO BE TYPE-R-1737, LIGHT DUTY, ROUND, LOCK-TYPE "H" CAM LUG-ECCENTRIC DEVICE, 1'- 19 1/4" DIAMETER, WEIGHT 115 LBS. BY NEENAH FOUNDRY COMPANY, NEENAH, WISCONSIN, OR SIMILAR TYPE BY FLOCKHART FOUNDRY COMPANY OR APPROVED EQUAL.

C. WELL PIT SHALL BE CONSTRUCTED AS SHOWN ON THE PLAN AND SIX (6) INCH TRANSITE OR PLASTIC CONDUIT PLACED UNDERGROUND AS SHOWN, TO PERMIT PLACING PIPE TO CONNECT THE WELL WITH THE PUMP AND STORAGE TANK. CONCRETE WELL PIT COVER TO HAVE NO. 2 REINFORCING BARS PLACED AT FOUR (4) INCHES O. C. EACH WAY.

ROOFING AND SHEET METAL WORK

1. EXTENT OF WORK

A. INSTALL BUILT-UP ROOFING, SHEET METAL WORK, FLASHINGS, (INCLUDING VENT PIPE FLASHING) GRAVEL STOPS AND SKYLIGHT GRAVITY ROOF VENT UNITS.

2. BUILT-UP ROOFING AND FLASHINGS

A. INSTALL GRAVEL-SURFACED "20 YEAR BOND" TYPE ROOF, EITHER:

(1) BARRETT'S TYPE AA "SPECIFICATION" ROOF, OR CAREY'S "SPECIFICATION NO. 3-B," KOPPER'S "SPECIFICATION NO. 17" ROOF.
(2) JOHNS-MANVILLE'S 4-PLY AQUADAM (SPEC NO. 801) ROOF, OR CAREY'S 3-A, AND GRAVEL SURFACED, OR,
(3) OWENS-CORNING FIBERGLASS CORP'S. "SPEC 320 IGD" FIBERGLASS REINFORCED ASPHALT ROOF BUILT-UP OF ASPHALT FILLED FIBERGLASS MATS AND ASPHALT,, GRAVEL SURFACED.

B. GRAVEL STOPS AND OTHER MOPPED-IN METAL FLASHING SHALL BE INSTALLED AFTER ALL ROOFING PLIES ARE IN PLACE AND SHALL HAVE ROOF LEG COATED WITH BITUMINOUS PAINT BEFORE BEING PLACED. APPLY AT LEAST 2-PLY MEMBRANE FLASHINGS OVER SAME BEFORE APPLYING THE FINAL FLOOD COAT OF BITUMINOUS.

3. GRAVEL STOP

A. GRAVEL STOP TO BE EXTRUDED ALUMINUM, TYPE F, STANDARD THICKNESS, BY ALCOA NO. 84968, 7 3/4" FACE OR SIMILAR DESIGN BY REYNOLDS OR KAISER OR APPROVED EQUAL.

4. SKYLIGHT VANTILATORS, FORCED AIR, FAN DRIVEN

A. PLASTIC DOMED SKYLIGHT VENTILATORS TO BE STANDARD SKYDOMES WASCO NO. LV 5252 AS MANUFACTURED BY THE WASOLITE, WASCO PRODUCTS, INC., CAMBRIDGE, MASS., OR VANCO DOMELITE, E. VAN NOORDEN COMPANY, BOSTON, MASS. SIZE 46 1/4" x 46 1/4", OR EQUAL

B. SKYLIGHT VENTILATORS TO BE FACTORY ASSEMBLED UNITS, EACH CONSISTING OF AN ACRYLIC PLASTIC DOME, EXTRUDED ALUMINUM FRAME AND CURB FRAME WITH CONDENSATION AND WEEPAGE GUTTERS. DOMES TO BE "WHITE TRANSLUCENT" PLASTIC, A 110 VOLT, 60 CY, 67 WATTS, 8" FAN, HEAVY-DUTY SHALL BE USED WITH CFM OF 425, CONTINUOUS OPERATION.

WINDOWS

ALUMINUM WINDOWS

1. EXTENT OF WORK

A. FURNISH AND INSTALL ALL ALUMINUM WINDOWS REQUIRED TO COMPLETE THE BUILDING IN ACCORDANCE WITH THE ARCHITECT'S DRAWINGS AND AS HEREINAFTER SPECIFIED.

B. NO GLAZING OR CAULKING OF WINDOWS IS REQUIRED UNDER THIS BRANCH OF WORK.

ALUMINUM WINDOWS (CONTINUED)

1. EXTENT OF WORK (CONTINUED)

C. FURNISH FOUR COPIES OF SHOP DRAWINGS FOR APPROVAL, PRIOR TO SHIPPING.

2. ALUMINUM WINDOWS

A. WINDOWS SHALL BE OF SIZES SHOWN ON THE DRAWINGS AND OF "COMMERCIAL PROJECTED" CONSTRUCTION, OUTSIDE GLAZED.

B. WINDOWS FURNISHED SHALL BE THOSE OF WILLIAM BAYLEY COMPANY, LUDMAN, MESKER BROTHERS OR TRUSCON STEEL COMPANY AND SHALL MEET SPECIFICATION PV-2 OF THE ALUMINUM WINDOW MFRS. ASSOCIATION.

C. WINDOWS SHALL BE PROPERLY CLEANED AFTER FABRICATION.

D. HARDWARE SHALL BE SOLID CAST WHITE BRONZE AND IN ACCORDANCE WITH THE MANUFACTURER'S STANDARD PRACTICE.

E. ALL BOLTS, CLAMPS, ANCHORS ETC., REQUIRED FOR INSTALLATION, SHALL BE FURNISHED.

F. WINDOWS SHALL BE CAUSTIC ETCHED AND SPRAY LACQUERED IN THE SHOP.

3. ERECTION

A. WINDOWS SHALL BE SET PLUMB AND TRUE IN OPENINGS AND SHALL BE SUBSTANTIALLY ANCHORED.

B. PROPER PROVISION SHALL BE MADE FOR CAULKING, BY OTHERS.

C. ALL VENTILATORS SHALL BE ADJUSTED SO AS TO OPERATE SMOOTHLY.

CARPENTRY AND MISCELLANEOUS

1. EXTENT OF WORK

A. FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE ALL ROUGH AND FINISHED CARPENTRY REQUIREMENTS OF THE BUILDING AND ALL MISCELLANEOUS ITEMS OF WORK SPECIFIED HEREINAFTER, ALL AS SHOWN ON THE PLANS AND/OR HEREIN SPECIFIED.

B. INCLUDE MISCELLANEOUS WORK AS FOLLOWS:
(1) GLASS AND GLAZING
(2) CAULKING
(3) FINISH HARDWARE

C. FURNISH ALL BOLTS, ANCHORS, INSERTS, ETC., REQUIRED TO BE BUILT INTO THE WORK OF OTHERS FOR SECURING WOOD PARTS, AND SUPERVISE THEIR INSTALLATION

2. ROUGH CARPENTRY

A. ALL LUMBER, SIDING, TRIM, THROUGHOUT: EXCEPT OTHERWISE NOTED, SHALL BE SHS STD. K.D. NO. 1 COMMON OR BETTER, SOUTHERN YELLOW PINE OF SIZE INDICATED ON DRAWINGS. ALL LUMBER TO BE PENTACHLOROPHENOL TREATED-SEE PAR.C.

B. ALL DOORS TO BE FLUSH PANEL, SOLIDCORE, BIRCH, SELECT OF SIZES INDICATED ON DOOR SCHEDULE AND WITH METAL "AIROLITE" LOUVERS AND ALUMINUM SCREENING BY AIROLITE CORPORATION OR APPROVED EQUAL. LOUVERS TO BE MILL INSTALLED.

C. PENTACHLOROPHENOL TREATED LUMBER SHALL BE USED THROUGHOUT THE ENTIRE JOB AND SHALL BE TREATED TO 6 LBS. RETENTION IN ACCORDANCE WITH THE REQUIREMENT FOR PENTACHLOROPHENOL TREATMENT, SEC. M-8.3 OF THE STATE OF OHIO, DEPARTMENT OF HIGHWAYS "CONSTRUCTION AND MATERIAL SPECIFICATIONS." THE TREATING SOLUTION SHALL MEET THE REQUIREMENTS OF SEC. M-10.28.

3. WALL PANELING

A. FOR MEN'S AND WOMEN'S TOILETS ONLY, PROVIDE AND INSTALL WALLS AND CEILINGS OF 48"x96"x 5/32" DELUXE HI GLOSS PANELS OF "MARLITE" (MARSH WALL PRODUCTS INC.) APPLIED TO 5/8" EXTERIOR PLYWOOD SHEATHING BY MARSH MASTIC APPLICATION (MARSH WALL PRODUCTS, INC.) AND FINISHED AT CEILING AND BASE WITH MARSH-M-45A DRIVE-ON ALUMINUM MOLDING: AT CORNER WALL INTERSECTIONS WITH MARSH MOLDING M-59A.

WALL PANELS TO BE APPLIED VERTICALLY WITH MARSH-65 A MOULDING AS INDICATED ON THE DRAWINGS. ENTIRE "MARLITE" INSTALLATION TO BE EXECUTED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS (MARSH WALL PRODUCTS, INC., DOVER, OHIO)

MARLITE COLOR: WILLOW GREEN

ABOVE WALL PANELING TO BE AS SPECIFIED OR APPROVED EQUAL.

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CARPENTRY AND MISCELLANEOUS (CONTINUED)

4. INSULATION

A. PROVIDE AND INSTALL 4" FIREPROOF MINERAL WOOL ENCASED BLANKET IN ENTIRE CEILING OF BUILDING AND 2" FIREPROOF MINERAL WOOL ENCASED BLANKET ON ALL WALLS AND PARTITIONS OF THE BUILDING. ACCEPTABLE MANUFACTURERS: CELOTEX CORP., CHICAGO, ILLINOIS, ARMSTRONG AND JOHNS-MANVILLE OR APPROVED EQUAL.

5. INSULATION VENTS

A. ROOF JOIST SPACE VENTILATION WILL DISCHARGE INTO ROOF VENTS - SEE DETAIL.

6. TOILET PARTITIONS

A. PROVIDE AND INSTALL ALL OVERHEAD-BRACED METAL TOILET PARTITIONS COMPLETE WITH HARDWARE. PARTITIONS TO BE GALVANIZED AND BONDERIZED PANELS AT LEAST 1" THICK WITH A BAKED-ON ENAMEL FINISH, COLOR TO BE SELECTED. ACCEPTABLE MANUFACTURERS: MILLS COMPANY, CLEVELAND, OHIO, HENRY WEIS MANUFACTURING CO., ELKHART, INDIANA, FIAT METAL MFG. CO., CHICAGO, ILLINOIS, OR SANYMETAL PRODUCTS CO. INC., CLEVELAND, OHIO.

7. TOILET ROOM ACCESSORIES

A. FURNISH AND INSTALL FOUR (4) 16" x 24" CHROME EDGED MIRRORS AS INDICATED ON DRAWINGS, PARKER CO., MIAMI CAREY OR HALLMACK OR APPROVED EQUAL.

8. GLAZING

A. GLAZE ALL WINDOWS, FURNISHING GLAZING CLIPS FOR WINDOWS.

B. TOILET ROOM WINDOWS SHALL HAVE 1/8" HAMMERED GLASS. GLASS SHALL BE EITHER "L.O.F." OR "BLUE RIDGE" OR "MISSISSIPPI GLASS CO." OR "J. MERRILL RICHARDS," BOSTON, MASS.

C. ALL GLAZING SHALL BE DONE WITH APPROVED GLAZING COMPOUND AS MANUFACTURED BY DICKS-PONTIUS, KUHLS, PERCORA, PITTSBURGH OR TREMCO.

D. GLASS IN METAL WINDOWS SHALL BE BEDDED, CLIPPED AND FACE GLAZED.

E. LEAVE ALL GLASS UNBROKEN AND CLEAN AT COMPLETION OF STRUCTURE.

9. CAULKING

A. CAULK AROUND METAL WINDOWS AND EXTERIOR DOOR FRAMES IN A THOROUGH MANNER, USING THE FIRST QUALITY GUN-GRADE COMPOUND OF THEMCO, PERCORA, KUHL'S OR EQUAL. FOLLOW GUN WITH HAND PRESSURE TOOL WHEREVER NECESSARY FOR FIRST CLASS JOB.

B. REMOVE ALL STAINS FROM CAULKING AT ONCE, FROM SILLS, FRAMES ETC.

10. FINISH HARDWARE

A. SEE "DOOR HARDWARE SCHEDULE" ON PLANS.

B. HARDWARE AS MANUFACTURED BY: STANLEY, GLYNN-JOHNSON, RUSSELL AND ERWIN, CORBIN, SARGENT, YALE AND TOWNE, MCKINNEY, HAGER OR EQUAL WILL BE ACCEPTABLE.

C. ALL LOCK CYLINDERS SHALL BE KEYED ALIKE, AND MASTERKEYED. FURNISH 2 KEYS FOR EACH LOCK.

D. FINISH FOR LOCKSETS SHALL BE AS SHOWN.

E. INSTALL FINISH HARDWARE NEATLY AND ACCURATELY AND SO THAT IT OPERATES EASILY, QUIETLY AND PROPERLY.

F. LOCKS, TRIM, ETC., SHALL BE FITTED PRIOR TO START OF PAINTER'S WORK, BUT SHALL NOT BE PERMANENTLY INSTALLED UNTIL PAINTER'S WORK IS COMPLETED.

ELECTRICAL

1. NOTES

A. THE CONTRACTOR FOR THIS WORK IS REFERRED TO "INSTRUCTIONS TO BIDDERS AND GENERAL CONDITIONS" AS A PART OF THIS CONTRACT.

B. THIS CONTRACTOR SHALL CAREFULLY READ THE SPECIFICATIONS OF ALL BRANCHES OF WORK PERTAINING TO THE BUILDING SO THAT HE MAY BE FULLY INFORMED AS TO THE WORK TO BE DONE BY EACH CONTRACTOR.

C. THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF THE OTHER CONTRACTORS IN ORDER TO AVOID DELAY AND INTERFERENCE IN CARRYING OUT THE GENERAL CONSTRUCTION OF THE PROJECT.

D. THE SUBMISSION OF A BID FOR THIS BRANCH OF WORK SIGNIFIES THAT THE CONTRACTOR HAS EXAMINED THE DRAWINGS AND SPECIFICATIONS FOR ALL BRANCHES OF WORK FOR THE PROJECT AND HAS VISITED THE SITE AND IS ACQUAINTED WITH ALL CONDITIONS WHICH MAY IN ANY WAY WHATSOEVER AFFECT THE EXECUTION OF THE WORK.

E. WHERE A MATERIAL OR METHOD IS DESCRIBED BY PERFORMANCE DATA ONLY, ANY PRODUCT OR METHOD MEETING SUCH REQUIREMENTS MAY BE USED. WHERE MORE THAN ONE BRAND NAME IS SPECIFIED, THE FIRST NAME IS THE PRODUCT WHOSE DIMENSIONS AND PERFORMANCE CHARACTERISTICS WERE USED IN THE DESIGN. THE OTHER NAMED PRODUCTS MAY BE USED BUT WITH THE UNDERSTANDING THAT IF CHANGES TO THE BUILDING ARE REQUIRED BECAUSE OF DIMENSIONS OR CHARACTERISTICS OF THAT PRODUCT, ANY ADDITIONAL COST SHALL BE A PART OF THE BID.

F. IN CASE ANY CONFLICT DEVELOPS BETWEEN DRAWINGS AND SPECIFICATIONS, SAME SHALL BE REFERRED BY THE CONTRACTOR TO THE ENGINEER FOR DECISION AS TO METHOD AND/OR MATERIAL.

2. EXTENT OF WORK

A. THE CONTRACTOR FOR THIS WORK SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT AND INSTALL COMPLETE ALL ELECTRIC WORK AS HEREINAFTER SPECIFIED AND AS SHOWN ON THE PLANS FOR THE TWO REST AREAS.

B. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND SPECIAL REGULATIONS OF THE STATE FIRE MARSHALL AND THE STATE DEPARTMENT OF WORK-SHOPS AND FACTORIES.

C. ALL MATERIAL SHALL BE NEW AND CONFORM WITH THE STANDARDS OF THE UNDERWRITER'S LABORATORIES, INC WHEREVER SUCH STANDARDS HAVE BEEN ESTABLISHED AND SHALL FULFILL THE NORMAL REQUIREMENTS FOR SATISFACTORY WORKMANSHIP.

3. INSPECTION

A. ALL WORK SHALL BE INSPECTED BY THE ELECTRICAL INSPECTION BUREAU, INC., OR ANY APPROVED ELECTRICAL INSPECTION AGENCY WHICH GUARANTEES ITS WORK.

B. UPON COMPLETION OF THE WORK THE CONTRACTOR SHALL FURNISH TO THE ENGINEER, A CERTIFICATE OF INSPECTION AND APPROVAL FROM SAID BUREAU OR AGENCY BEFORE FINAL PAYMENT ON CONTRACT WILL BE ALLOWED.

C. FEE FOR INSPECTION SHALL BE PART OF THIS CONTRACT.

4. SERVICE

A. SERVICE SHALL BE SINGLE PHASE, 60 CYCLES, 120/240 VOLTS A.C., 3 TO 2 WIRE DISTRIBUTION FOR LIGHTS AND SMALL MOTORS AND 240 VOLTS FOR HEATING UNITS.

5. SERVICE ENTRANCE

The Contractor shall furnish and install three 1/c AWG No. No. 4/0 Type RHW conductors from the service pole at each site, through 3" Wrought Iron, Galvanized, Conduit to the service panel in the Utility Building at each site. The cable shall be General Electric No. S.I. 58006 or approved equal. This item shall not be included in the unit price bid for Item Special, Roadside Toilet and Storage Unit. Payment for Service Entrance Conductors shall be the actual lineal feet of Item S-25, Service Entrance Cable, furnished and installed, and in accordance with Item S-25.

ELECTRICAL (CONTINUED)

6. PANELBOARD

A. *Panelboard shall be designed for a single phase, 3 wire 120/240 V. A-C system. It shall meet requirements for service entrance equipment and the mains rating be 200 amps.*

B. *Overcurrent protective devices shall be 15 amp. single pole circuit breakers for building lights and vent fans, and 30 amp. 240 volt circuit breakers for heating, Sewage Plant and Mercury Arc lighting circuits.*

C. CABINET SHALL BE SINGLE DOOR TYPE AND PANEL OF SQUARE D, GENERAL ELECTRIC OR BULLDOG MAKE.

D. CABINET SHALL BE OF SURFACE TYPE, CONSTRUCTED OF CODE GAGE STEEL AND GALVANIZED OR PAINTED WITH AN APPROVED PROTECTIVE PAINT OR LACQUER. CABINET SHALL BE PROVIDED WITH WIRING GUTTERS AT TOP, BOTTOM AND SIDES. FRONT SHALL HAVE CODE GAGE METAL TRIM AND DOOR.

E. DOOR SHALL BE PROVIDED WITH CYLINDER TYPE LOCK AND THREE KEYS SHALL BE DELIVERED TO THE ENGINEER.

7. HEATING UNITS AND CONTROLS

A. THIS CONTRACTOR SHALL PROVIDE AND INSTALL WHERE SHOWN, 3 ELECTRIC HEATING UNITS FOR EACH TOILET ROOM.

B. EACH UNIT SHALL HAVE A RATING OF 2 KW AND BE TYPE H AS MADE BY CHROMALOX, OR NO. 680-32 INDEECO FOR 230 VOLTS, SINGLE PHASE, 60 CYCLES, A.C.

C. THE GROUP OF THREE IN EACH TOILET ROOM SHALL BE CONTROLLED BY A PROPER TYPE THERMOSTAT AND CONTACTOR BOTH LOCATED WHERE SHOWN. THERMOSTATS AND CONTACTORS SHALL BE MADE BY MANUFACTURERS OF HEATING UNITS SUPPLIED.

8. PHOTOELECTRIC CONTROL SWITCH

A. *Lighting Circuit Design Shall Provide Manual By-Pass Switching For Lobby Circuit And Toilet Rooms Circuit in Addition To Automatic Photo Electric Control.*

B. CONTROL SWITCH SHALL BE A G.E. CATALOG NO. C420G016 OR APPROVED EQUAL.

C. SWITCH SHALL BE MOUNTED ON ROOF AT POINT DIRECTED.

9. WIRE AND WIRING

A. WIRE SHALL BE RUBBER COVERED GRADE RHW NON-METALLIC SHEATH CABLE OF TYPE NMC AND BEAR UNDERWRITER'S LABEL.

B. ALL WIRING SHALL BE RUN CONCEALED.

C. WIRE SHALL NOT BE SPLICED ANYWHERE EXCEPT IN OUTLET BOXES. ALL SPLICE JOINTS SHALL BE CAREFULLY MADE, CLEANED, SOLDERED AND TAPED WITH SCOTCH NO. 33 ELECTRICAL TAPE.

D. NO WIRE LESS THAN NO. 12 AWG SHALL BE USED. WIRE SIZE FOR LONG RUNS SHALL BE SUCH SIZE THAT THE DROP IN POTENTIAL TO THE FARTHEST OUTLET SHALL NOT EXCEED 2 %/ UNDER MAXIMUM LOAD.

E. NO JOISTS OR BEAMS SHALL BE NOTCHED TO RUN WIRES. HOLES SHALL BE BORED FOR SAME, AND WIRES ARE TO BE BUSHED WITH PORCELAIN TUBES WHERE THEY RUN THROUGH WOOD THE ENTIRE THICKNESS.

F. RUNS OF CABLES BETWEEN OUTLET BOXES SHALL BE PROPERLY SUPPORTED OR STRAPPED IN PLACE.

G. CABLE SHALL ENTER BOXES THROUGH A KNOCKOUT AND SHALL BE CLAMPED TO THE BOX IF NOT SUPPORTED WITHIN 8" OF BOX.

10. OUTLET BOXES AND FITTINGS

A. ALL LIGHT AND SWITCH OUTLET BOXES SHALL BE OF HEAVY PRESSED GALVANIZED STEEL OF A STANDARD MAKE AND OF SIZE, SHAPE USAGE, AND CONNECTIONS.

B. OUTLETS FOR LIGHT FIXTURES SHALL BE 4" SQUARE OR OCTAGONAL.

C. WHERE TWO OR MORE SWITCHES ARE SHOWN AT ONE POINT, GANG OUTLET BOXES SHALL BE USED.

11. SWITCHES

A. ALL SWITCHES SHALL BE FLUSH TYPE TUMBLE SWITCHES, GENERAL ELECTRIC NO. 2842 OR APPROVED EQUAL AS MADE BY ARROW-HART AND HEGMAN, PASS AND SEYMOUR, BRYANT OR HUBBELL.

JUN 14 1965
7-17-62

REST AREA ~ GENERAL NOTES

REST AREAS-ROADSIDE TOILETS & STORAGE UNIT
GENERAL NOTES

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PRE-70-2.47

ELECTRICAL (CONTINUED)

12. PLATES

"A" ALL SWITCH PLATES SHALL BE .06" THICK METAL, NICKEL PLATED OR STAINLESS STEEL.

"B" AT POINTS WHERE TWO OR MORE SWITCHES ARE LOCATED, GANG OUTLET BOXES SHALL BE USED.

13. GROUNDING

"A" SYSTEM SHALL BE GROUNDED IN ACCORDANCE WITH REQUIREMENTS OF NATIONAL ELECTRICAL CODE.

14. FIXTURE SCHEDULE

"A" THIS CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE, INCLUDING LAMPS, ALL LIGHTING FIXTURES FOR THE BUILDING. THE STYLE OF FIXTURE BY A LETTER AND NUMBER RESPECTIVELY.

"B" STYLE "A" SHALL BE AN ART METAL #15-1115 C.H.
STYLE "B" SHALL BE AN ART METAL #10-1119 C.H.
STYLE "C" SHALL BE AN ART METAL #10-1110 A.A.
STYLE "D" SHALL BE A PORCELAIN OUTLET BOX RECEPTACLE

"C" SIMILAR FIXTURE AS MADE BY PRESCOLITE OR VIRDEN WILL BE ACCEPTABLE SUBJECT TO ENGINEER'S APPROVAL.

15. SEWAGE TREATMENT PLANT

"A" THIS CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY ELECTRICAL DEVICES AND WIRING REQUIRED FOR SERVICE TO AND THE OPERATION OF THE SEWAGE TREATMENT PLANT AS HEREIN DESCRIBED IN SPECIFICATIONS FOR SEWAGE TREATMENT PLANT. *CABLE & CONDUIT AS PER SPEC. Sh.No.10 & 28*

16. VENT FAN WITH SKYDOME - SEE DRAWING

- PLUMBING -

NOTES;

1. "A" THE CONTRACTOR FOR THIS WORK IS REFERRED TO "INSTRUCTIONS TO BIDDERS AND GENERAL CONDITIONS" AS PART OF THIS CONTRACT.

"B" THIS CONTRACTOR SHALL CAREFULLY READ THE SPECIFICATIONS OF ALL BRANCHES OF WORK PERTAINING TO THE BUILDING SO THAT HE MAY BE FULLY INFORMED AS TO THE WORK TO BE DONE BY EACH CONTRACTOR.

"C" THIS CONTRACTOR SHALL CO-ORDINATE HIS WORK WITH THE WORK OF THE OTHER CONTRACTORS IN ORDER TO AVOID DELAY AND INTERFERENCE IN CARRYING ON THE GENERAL CONSTRUCTION OF THE PROJECT.

"D" THE SUBMISSION OF A BID FOR THIS BRANCH OF WORK SIGNIFIES THAT THE CONTRACTOR HAS EXAMINED THE DRAWINGS AND SPECIFICATIONS FOR ALL BRANCHES OF WORK FOR THE PROJECT AND HAS VISITED THE SITE AND IS ACQUAINTED WITH ALL CONDITIONS WHICH MAY IN ANY WAY WHATSOEVER EFFECT THE EXECUTION OF THE WORK.

"E" WHERE A MATERIAL OR METHOD IS DESCRIBED BY PERFORMANCE DATA ONLY, ANY PRODUCT OR METHOD MEETING SUCH REQUIREMENTS MAY BE USED. WHERE MORE THAN ONE BRAND NAME IS SPECIFIED THE FIRST NAMED IS THE PRODUCT WHOSE DIMENSIONS AND PERFORMANCE CHARACTERISTICS WERE USED IN THE DESIGN. THE OTHER NAMED PRODUCTS MAY BE USED BUT WITH THE UNDERSTANDING THAT IF CHANGES TO THE BUILDING ARE REQUIRED BECAUSE OF DIMENSIONS OR CHARACTERISTICS OF THAT PRODUCT. ANY ADDITIONAL COST SHALL BE A PART OF THE BID.

"F" IN CASE ANY CONFLICT DEVELOPS BETWEEN DRAWINGS AND SPECIFICATIONS, SAME SHALL BE REFERRED BY THIS CONTRACTOR TO THE ENGINEER FOR A DECISION AS TO METHOD AND FOR MATERIAL.

2. EXTENT OF WORK

"A" THE CONTRACTOR FOR THIS WORK SHALL FURNISH ALL LABOR, MATERIAL AND EQUIPMENT AND INSTALL COMPLETE, ALL WORK AS HEREINAFTER SPECIFIED, INCLUDING ALL 6" CAST IRON SEWER PIPE TO A MINIMUM DISTANCE OF 100' FROM WATER WELL OR AS SHOWN ON THE PLANS.

3. INSPECTION

"A" ALL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE OHIO STATE PLUMBING CODE AND HAVE STATE PLUMBING INSPECTION.

"B" THE CONTRACTOR SHALL TAKE OUT A PERMIT WITH THE DIVISION OF STATE PLUMBING INSPECTION BEFORE STARTING ANY WORK. FEE FOR SAME SHALL BE A PART OF THIS CONTRACT AND INCLUDED IN THE UNIT PRICE BID.

"C" WHEN WORK IS COMPLETED, THE CONTRACTOR SHALL FURNISH TO THE ENGINEER, A CERTIFICATE OF APPROVAL FROM THE STATE DEPARTMENT OF HEALTH BEFORE FINAL PAYMENT WILL BE ALLOWED.

4. ROUGHING-IN

"A" ALL PLUMBING FIXTURES SHALL BE LOCATED AND "ROUGHED-IN" AS SHOWN BY PLANS AND PLUMBING DIAGRAMS.

"B" CLEANOUTS SHALL BE PROVIDED WHERE SHOWN AND CALLED FOR BY THE STATE PLUMBING CODE AND BE INSTALLED IN SUCH A MANNER AS TO BE EASILY ACCESSIBLE FOR RODDING.

"C" ALL WASTE AND VENT LINES ABOVE THE FLOOR SHALL BE STANDARD WEIGHT GALVANIZED STEEL PIPE. FITTINGS FOR WASTE LINES SHALL BE BLACK CAST IRON DRAINAGE TYPE. FITTINGS FOR VENT LINES SHALL BE GALVANIZED MALLEABLE IRON.

"D" ALL EXPOSED WORK SHALL BE RUN IN A NEAT MANNER ACCEPTABLE TO THE ENGINEER.

5. BUILDING DRAIN

"A" THE BUILDING DRAIN SHALL BE OF EXTRA HEAVY CAST IRON SOIL PIPE AND FITTINGS AND RUN AS SHOWN ON THE PLANS, AS TO LOCATION, SIZE AND CONNECTIONS, TO A MINIMUM DISTANCE OF 100 FEET FROM THE WELL AS SHOWN ON THE PLANS.

"B" ALL JOINTS SHALL FIRST BE CAULKED WITH OAKUM AND THEN WELL CAULKED WITH LEAD NOT LESS THAN 1" DEEP.

"C" LINES SHALL HAVE A FALL OF NOT LESS THAN 1/8" PER FOOT.

6. EXCAVATION AND BACKFILL

"A" TRENCHES NECESSARY FOR LAYING OF DRAINS, OR ANY OTHER LINES UNDER THIS CONTRACT, SHALL BE EXCAVATED AND BACKFILLED BY THE PLUMBER.

"B" ANY EXCAVATION WITHIN FIVE FEET OF THE EDGE OF ANY FOOTING AND BELOW THE ELEVATION OF BOTTOM OF SAME, SHALL BE BACKFILLED WITH CLASS "E" CONCRETE TO LEVEL OF BOTTOM OF FOOTING.

"C" ALL TRENCHES SHALL BE BACKFILLED BY TAMPING IN THIN LAYERS OF CLEAN DIRT AND PUDDLING.

"D" NO TRENCH SHALL BE BACKFILLED UNTIL THE LINE IN SAME HAS BEEN INSPECTED AND APPROVED BY THE PROPER INSPECTOR.

"E" THE SURFACE OF BACKFILLED TRENCH SHALL BE RESTORED TO A CONDITION AS GOOD AS THE ORIGINAL SURFACE.

7. WATER PIPING

"A" MAIN SHALL START FROM THE STORAGE TANK OF WATER SYSTEM WHICH WILL BE FURNISHED LATER BY OTHERS AND BE RUN AS SHOWN ON THE PLANS AS TO SIZES, LOCATIONS AND VALVING.

"B" EACH BRANCH SHALL BE PROVIDED WITH AN ALL BRASS GATE VALVE, 125 LBS. CLASS.

"C" PIPE SHALL BE GALVANIZED STEEL, FITTINGS GALVANIZED MALLEABLE IRON

"D" TWO BRASS HOSE FAUCET DRAINS SHALL BE PROVIDED AND INSTALLED WHERE SHOWN AND THE LINES SHALL BE RUN SO AS TO DRAIN AT THESE POINTS.

8. CUTTING AND PATCHING

"A" THE CUTTING OF NEW CONCRETE, MASONRY OR ANY OTHER WORK SHALL BE AVOIDED BY THE USE OF SLEEVES INSTALLED AS THE WORK PROGRESSES.

"B" IN CASE IT IS NECESSARY TO CUT INTO THE WORK OF ANOTHER CONTRACTOR IT SHALL BE DONE BY THAT CONTRACTOR AT THIS CONTRACTOR'S EXPENSE OR BY THIS CONTRACTOR WITH THE PERMISSION OF THE OTHER CONTRACTOR.

"C" ANY REPAIRING OF PATCHING MADE NECESSARY BY SUCH CUTTING SHALL BE EXECUTED ON THE SAME BASIS, ALL TO THE SATISFACTION OF THE ENGINEER.

9. FLOOR DRAINS

"A" SHALL BE ZURN FIG. 2N-215V OR APPROVED EQUAL AS MADE BY JOSAM WADE, BOOSEY OR ASCO.

"B" CAST IRON 1/2 "S" TRAPS SHALL BE USED WITH EACH FLOOR DRAIN.

10. WATER CLOSETS

"A" SHALL BE COMPLETE AS AMERICAN STANDARD F-2495-B EXCEPT SEAT SHALL BE WHITE OLSONITE NO. 1000. OR APPROVED EQUAL AS MADE BY CHURCH OR STASCO. WITH SLOAN NO.152 FLUSH VALVE.

"B" EQUAL CLOSETS AS MADE BY CRANE, KOHLER OR ELJER WILL BE ACCEPTABLE SUBJECT TO ENGINEER'S APPROVAL.

11. URINALS

"A" IN MEN'S TOILET ROOM SHALL BE COMPLETE AS AMERICAN STANDARD F-6255-5 OR APPROVED EQUAL AS MADE BY CRANE, KOHLER OR ELJER. WITH SLOAN NO.152 FLUSH VALVE.

"B" THE ONE IN THE WOMEN'S TOILET ROOM SHALL BE COMPLETE AS AMERICAN STANDARD F-5835-5 OR APPROVED EQUAL AS MADE BY CRANE, KOHLER OR ELJER. WITH SLOAN NO.152

12. LAVATORIES

"A" SHALL BE 20" X 18" AND COMPLETE AS PER AMERICAN STANDARD P-3867-40 EXCEPT COLD WATER FAUCET SHALL BE R-2213 OR CHICAGO NAIAD, SHALL BE NO HOT WATER FAUCET BUT A R-2560, FAUCET HOLD COVER FOR SAME, SUPPLY PIPE R-2607 AND TRAP R-7003-45.

"B" EQUAL LAVATORIES AS MADE BY CRANE, KOHLER OR ELJER WILL BE ACCEPTABLE SUBJECT TO THE ENGINEERS APPROVAL.

13. DRINKING FOUNTAIN

"A" SHALL BE A-CRANE 6-590 OR APPROVED EQUAL AS MADE BY AMERICAN STANDARD, KOHLER OR ELJER EQUIPPED WITH MODERN KELLY PUSH BUTTON AUTOMATIC FREEZE PROOF WATER AND DRAIN ASSEMBLY AND CABINET.

14. SUPPORTS FOR WATER CLOSETS AND URINALS

"A" WATER CLOSETS SHALL BE SUPPORTED BY ZURN Z-1205 SERIES FIXTURES SUPPORTS.

"B" WOMEN'S URINALS SHALL BE SUPPORTED BY SIMILAR TYPE SUPPORT.

"C" EQUAL SUPPORTS MADE BY JOSAM AND CRANE WILL BE ACCEPTABLE.

15. CLEANING AND PAINTING

"A" AFTER ALL PIPING HAS BEEN APPROVED, ALL SHALL BE CLEANED AND LEFT IN A FIRST CLASS CONDITION FOR PAINTING.

METHOD OF MEASUREMENT

THE ITEM SPECIAL, "ROADSIDE TOILETS AND STORAGE UNIT" AND ALL APPERTENANCES AS DETAILED AND SPECIFIED ON THE PLANS SHALL BE CONSIDERED AS ONE UNIT. THE NUMBER OF UNITS TO BE PAID FOR SHALL BE THE NUMBER OF EACH UNIT, LISTED AND ESTIMATED SEPARATELY, COMPLETE AND ACCEPTED.

BASIS OF PAYMENT

THE WORK INCLUDED IN THIS ITEM SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR EACH "ITEM SPECIAL, ROADSIDE TOILETS AND STORAGE UNIT" COMPLETED AND ACCEPTED, WHICH PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR FURNISHING, PREPARING, PLACING AND INSTALLING ALL MATERIALS, AND FOR ALL LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM AS SHOWN AND SPECIFIED ON THE PLANS.

JUN 14 1965
7-12-62
5-24-62

REST AREA ~ GENERAL NOTES

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PREBLE COUNTY
PRE-7.0-24.7

GENERAL NOTES LIGHTING

ELECTRICAL WORK-LIGHTING

DESCRIPTION

This item shall consist of furnishing all necessary material labor and facilities required to complete the electrical installation in accordance with the designs, dimensions and details shown in the plans and described in the specifications.

All material, workmanship and construction methods, except as modified here-in, shall conform to the Generl Requirement of the State of Ohio, Department of Highways, Construstion and Material Specifications, dated Jan. 1 1963.
The contractor shall also comply with the National Electric Code of The National Bureau of Fire Underwriters,

MATERIAL-GENERAL

Materials to be furnished may be specified in the plans by a given manufacturer's catalog number or type. This is for decriptive purposes only and the contractor may assume that approved equal material may be furnished.

CONDUIT-S 25.08

Conduit and couplings shall be standard weight genuine wrouht iron, galvanized after threading, A.S.T.M. Spec. A-72, Fed. Spec. W.W.P-441-B, or copper-nickel steel alloy, conforming to Supplemental Spec. M-106.11. Interior shall be coated with a suitable enamel or plastic coating in order to assure a smooth race way for wires, plugged, reamed and center butt joined without exposed threads, except concrete encastment is waived.

Payment for conduit shall be made at the contract unit price for each size and shall be full compensation for furnishing and installing conduit, and all materials including all fittings and nipples, excavation, trenching, backfill, restoration, surplus material disposal and all incidentals tools or equipment required to complete the work.

WIRE AND CABLE-S 25.09

Wire and cable installation shall conform to the above specification and shall be of the sizes and types shown on the plans. Pole and bracket cable shall be No. 12 A.W.G.

Wire and cable installed in conduit, poles, or cable-duct, shall meet Federal Aviation Agency specification No. L-824 Type A, shall be stranded single conductor copper, G.E. No. S.I. 58089, by General Cable or Anaconda, or approved equal.

Payment for wire and cable shall be made at the contract unit price which shall include all testing, splicing, material, labor, tools and incidentals necessary to complete this item.

The contractor shall furnish all necessary equipment and demonstrate to the satisfaction of the engineer that all circuits are free of short circuits and unspecified grounds and are properly connected and operable. System and equipment grounding shall be tested by approve method in the presence of the engineer.

CABLE MARKERS

The contractor shall furnish and install concrete markers (See Detail) as shown on the plans and at each deviation from the normal trench parallel to the roadway and as may be required to indicate deviation from normal straight runs to avoid obstacles. Cost of the markers shall be included in the unit price bid for the cable.

TRENCHING (CABLE-DUCT ONLY)

Trench shall be provided for all underground cable-duct at the locations in conformity to the design details and dimensions shown on the plans.

Trench for cable may be excavated manually or with mechanical trenching equipment. Trench walls shall be essentially vertical so that a minimum of shoulder surface is disturbed. Any deviation from the plan line of trench must be approved by the project engineer.

Trench bottom shall be smooth and free of coarse aggregate. Minimum width of trench bottom shall be eight inches for two cables. Minmum depth shall be 24 inches.

Backfill trench in accordance with Sec. 1-1.07 Type 4 except that the material in the first four inches above the backfill shall contain no pieces larger than one inch.

Payment for trenchs shall be made at the contract unit price bid. Price shall include excavation backfill, restoration, guardrail removal and replacement, disposal of surplus material, removal of rock, sand and graded backfill and for all preparation, labor, equipment, tools and incidentals necessary to complete this work.

RESTORATION (IF APPLICABLE)

All areas disturbed by excavation required for installation of cable trench, pull boxes, ducts, lighting standard foundations, control center foundations, service poles, storing of excavated earth and other material, cable laying and other work shall be restored to its original condition.

Where sod is established, it shall be carefully stripped and replaced as soon as backfilling is completed, backfilling of area where sod is removed shall be stopped at a depth equal to the thickness of the sod to be used with proper allowance for settlement.

Paved areas shall be placed in a manner equivalent to original surface or as detailed on the plans. The contractor shall be held responsible for maintaining all distured surfaces and replacements until final acceptance.

No separate payment shall be made for restoration. The cost of restoration shall be included in the unit price bid for installation of roadway lighting system items which require excavation or otherwise cause existing ground surface to be disturbed.

GROUNDING

All service equipment, lighting standards or sign structures shall be properly grounded in accordance with N.E.C. requirements. 1 inch X 10' Wrought Iron ground rods with exothermic type connection and #4 AWG 7 strand insulated copper wire shall be used unless otherwise noted. Rod connections shall be painted with two coats of Glyptal Insulating Enamel after installation. Resistance to ground shall not exceed 25 ohms. If resistance to ground exceeds 25 ohms, either additional rods shall be driven 10'-0" apart (max. of 5 extra rods) or sectional rods may be employed at greater depth. Rods shall be connected in paralled to grounding nut.

LIGHTING STANDARD FOUNDATIONS-S-25.11

Foundations shall conform to above specification and shall be sized as noted on the plans.

Payment shall be made on the basis of unit price bid for each size, which shall include all material, labor, and equipment necessary to complete the installation.

SERVICE POLE-POWER AND TELEPHONE

The contractor shall furnish and install service poles as detailed, complete with service equipment as shown on the typical detail for electric service pole.

Poles shall be A.S.A. Class 4, 35'-0" southern yellow pine, full "Penta" treated.

The contractor shall furnish and install all equip ment and appurtenances shown on service pole.

The contractor shall contact the utility companies serving the area and verify joint pole requirements.

Guy wire will not be permitted in the park area. If support is required, strain blocking method shall be used, as approved by the power company.

Clearance between power lines and telephone lines shall be approved by both utilities,

Payment shall be made on the basis of unit price bid and shall include all materials, labor, and use of equipment necessary to complete this item, including service switch.

SERVICE SWITCH

Service switch shall be watertight N.E.M.A. 4 construction of A.I.S.A. 302 or 303 stainless steel with flange mounted operating handle which can be locked in both on and off position. Switch shall be 200 Amperes, 240 Volts, 3 Pole, 3 Fuse Square "D" Class 9421, Type W. 999 FA 221E; Columbus Electic Works, Panels Inc., or approved equal. No hubs, no knockouts (Waterproof hubs field installed)

TELEPHONE SERVICE CONDUIT.

The contractor shall furnish and install a conduit run from the service pole contact point to the Toilet & Storage Building as shown on the plans. 1½" Conduit shall terminate in an L.B. Condulet and extend with a ¾"X4" nipple through telephone stand. A pull wire shall be drawn in the conduit for telephone companys use.

ISLAND AND RAMP CIRCUITS.

Island and ramp circuits shall consist of three 240 volt circuit of #4 Type R.H.W. neoprene jacketed cable enclosed in a 2½" conduit extending from Service equipment to the island. Circuit shall divide at the island to provide a separate fused circuit for the island and each ramp, (one of the three circuits per side, Circuits 1 & 13, are future proposed.)

Ramp circuit conduits shall extend five feet beyond pavement and a cable marker shall be placed at that point.

PICNIC AREA CIRCUITS

Picnic area circuit shall consist of two, 240 Volt circuits of #4 Type R.H.W., 7-strand insulated copper cable enclosed in 2" conduit extended from Service panel. The circuits shall be arranged to provide future separate switching on one of the center luminairies.

LUMINAIRE STANDARD LOCATIONS

Location of island and ramp standards shall be as shown on plans.

Picnic area standards are shown in approximate locations and are subject to final location by the project engineer and landscape architect.

A.S.A.-I.E.S. TYPE LIGHT DISTRIBUTION

A.S.A.-I.E.S. type distribution specified means the resultant final light pattern obtained on the roadway surface.

Contractor shall be responsible in seeing that any adjustments necessary are are performed to obtain the resultant distritbution specified.

BALLASTS

Picnic area lighting units shall have 250 watt, 230-460 Volt regulator type ballasts installed on ballast hangar located in pole transformer base. Line materials Industries, Cat. No. W. L.U. 28 A.2. Ballasts for street lighting shall be built-in 230/460 V. 60 cycle, low temperature, regulator type for 400 Watt lamps

LUMINAIRES

Luminaires shall be Mercury Vapor Type, suitable for use on multiple circuit, 240 volt 60 cycle operation and shall be complete with lamps.

Luminaires placed adjacent to travelled roadway or within the parking area shall be 400 Watt. Provide A.S.A.-I.E.S. Type III distribution with A.S.A. Code No. H-33-IC.D. Clear Lamp and shall have an integral 230/460 Volt regulated output ballast. The luminaire shall be similar in design and construction to General Electric Type M-400, Westinghouse OV-25, Line Material Unistyle or approved equal.

Luminaires for the picnic area shall be 250 Watt. Provide A.S.A.-I.E.S. Type V. Distribution with A.S.A. Code No. H-37-5 A % Clear Lamp. The luminaire shall be similar, in design and construction, to Line Materials Corporation type 2D Catalogue No. LM 19B3 G.E. PMA 115 G 050, Westinghouse Type VLP, complete with acrylic plastic prismatic refractor, or other approved equal.

CIRCUITS

Circuits for picnic area, island and street lighting shall be 240 Volt single phase, two wire multiple. All circuits shall be tested to the satisfaction of the engineer to demonstrate that they are free from open circuits, short circuits and grounds.

SPLICING MATERIALS

(a) Insulating Tape & Sheathing Tape, Cable Manufacturers' recommendations.
(b) Compression Connector in Standards, Burndy Type YC-C, Thomas & Betts, or approved equal.
(c) Cable Connector Kits Type II fused (Type KTK, 4 Amp Fuse) shall be used for cable connections in all Standards.
(d) Cable Connector Kits Type I or Type III shall be used for all Pull Box Cable connections.

SPLICES

No splices will be allowed except in man holes, lamp standard bases or pull boxes. No separate payment will be allowed for splices. Splices in pull boxes shall be Cable Splice kits Type I or Type III Splices in lamp standard bases (handholes) shall be Cable Connector Kits Type II.

DUCT FOR CABLE

Factory preassembled cable in polyethylene duct shall provide the number & size of insulated conductors specified. The number of conductors used in the duct and the "duct fill" shall conform to the requirements of the National Electric Code but in no case shall the nominal inside diameter of the duct be less than 1¼" inches. The cable duct shall be laid in parallel to the trench prior to installation and shall be provided in sufficient lengths to be installed without splices between pull boxes, lighting standards and sign supports. Allowances shall also be made for extensions into pull boxes for splicing, and for extension of the conductors through the handholes in lighting standards and sign supports.

Polyethylene Duct shall conform to ASTM D 2104, Schedule 40, type II Grade 3, or Type III.

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PREBLE COUNTY
PRE-7-2.47

GENERAL NOTES LIGHTING

Light Poles

Light poles shall be tapered steel poles, the shaft shall be fabricated from not less than #11 Manufacturers Standard Gauge, hot rolled, basic open hearth, carbon steel. It shall have only one longitudinal, automatically, electrically welded joint and shall have no intermediate transverse joints or welds. Only one length of sheet steel shall be used, which shall be formed into a continuously true tapered shaft, having a taper of approximately .14" per foot.

Shaft shall be cold worked after welding with sufficient pressure to develop a minimum yield strength of 48,000 psi and to flatten the weld to a true tapered tube of uniform thickness throughout (including the weld area), without flat spots and without finish grinding.

Light poles manufactured by means other than that specified above shall be made of not less than #11 Manufacturers Gauge steel with a minimum yield strength of 48,000 pounds per square inch, meet the permanent set and deflection values tabulated herein and otherwise meet the requirements of these specifications.

Light poles shall be capable of withstanding loadings (applied 18" from top of pole) without exceeding the permanent set and deflection (measured in inches 18" from top of pole) as tabulated for the respective pole sizes.

POLE SIZE (11Ga)	Elastic Defl. In/100lb (18" from top)	@ 2/3 Yield Strength Load	Total Deflection	Permanent Set	@ Yield Strength Load (18" from top)	Total Deflection	Permanent Set
6.5"x3.9"x18'-3"	1.16	564	7.04	.50	845	11.28	1.48
8"x3.87"x29'-6"	3.32	517	17.66	.50	776	28.84	3.08
9"x4.87"x29'-6"	2.16	659	14.73	.50	989	24.00	2.64

ANCHOR BOLT Diameter of Bolt Circle	Proj. above Fdtn.	MAX. ARM LENGTHS (Single or Double)	MTG. HGT.
15"	3"	—	21'-3"
11"	2 5/8"	10'-0"	32'-6"
12.5"	3"	15'-0"	32'-6"

Each pole shall be fitted with a "j" hook, pole top (of same physical design interchangeable with those now in use by system maintenance agency) and ornamental bolt covers.

Anchor base poles shall be fitted with 4"x6½" reinforced hand hole, locking steel cover and ⅝"-13 grounding nut welded to inside of pole opposite hand hole. Locate hand hole on field side of ground mounted poles. Anchor bases shall be one-piece cast steel conforming to ASTM Designation A 27, Grade 65-35, having a minimum yield of 35,000 psi. and scalloped top flange shall be secured to the lower end of the shaft by two continuous electric arc welds. The base shall telescope the shaft and the one weld shall be on the inside of the base at the end of the shaft, while the other weld shall be on the outside at the top of the base. The two welds shall be not less than 1½" apart. The welded connection shall develop the full strength of the adjacent shaft section to resist bending action.

The base shall be provided with four (4) holes to receive the anchor bolts, four (4) holes for ventilation located in the body of the base directly behind each anchor bolt hole, and four (4) tapped holes for attaching the ornamental covers.

Transformer bases for 6.0" thru 8.0" base diameter poles shall be fabricated steel, 20" high, 13" square at top and 16" square at bottom. The sides shall be not less than No. 7 Manufacturers Standard Gage steel SAE 1015 hot rolled semi-killed, modified to AISI carbon range, with yield point 30,000 psi minimum, and tensil strength of 50,000 psi. The door opening shall be approximately 8½"x9⅝"x13¾" and the door shall be secured in place by an approved locking device. After complete assembly, the base shall be shot blasted to remove all mill scale and weld slag. Each base shall be provided with four ¾" thick loose steel plate anchor clips to fasten the base down to the anchor bolts. Clips shall conform to specification for ¾" plates. The transformer base shall fasten to the shaft anchor base by means of four 1" diameter galvanized hex head machine bolts and nuts per ASTM specification A-307.

Transformer bases shall have ½"-13 tapped hole in base plate for grounding connection. Locate door opening on field side base unless site conditions dictate otherwise.

Four (4) high grade steel anchor rods, each fitted with a hex nut shall be furnished. Each anchor bolt shall have an "L" bend at the bottom end and be threaded at the top end. Threaded ends and all nuts shall be galvanized with galvanizing extending no more than 2" beyond thread. The anchor bolts shall be capable of resisting at yield strength stress the bending moment of the shaft at its yield strength stress. Anchor bolts shall be fabricated from steel. AISI C1035, hot rolled special quality, minimum yield strength 46,000 psi. This specificition is identical to ASTM A107, Grade 1035 Special Quality.

The bracket arm assembly shall consist of the upper and lower member securely joined by means of vertical strut or struts. The upper and lower members shall be standard strength steel pipe of 2" I.P.S. ASTM-120 schedule 40 or larger as required. The pole end of the arm of both members shall have a steel fitting welded to it, which will permit the positioning of the arm on the pole plate and shall be held only by gravity while the arm is secured to the pole by two cap screws per fitting. All arms shall be arranged to accommodate a 2" slip fitter. Fitting and pole plate shall be similar to those now in use by the agency maintaining the system to provide for interchangeability of arms.

Bracket arms and their related pole attachment devices shall sustain a vertical load of 250 lbs. applied within 3" of the luminaire end of the support without collapse or rupture of any portion of the pole assembly.

Bracket arms and their related pole attachment devices shall sustain a vertical load of 100 lbs. applied within 3" of the luminaire end of the support and with the support attached to a rigid structure. The vertical deflection shall not exceed 5½% of the support length. This includes a maximum allowance of ½ of 1% of the support length for testing methods and permanent set.

Deflection shall be defined as the total transverse displacement of the longitudinal centerline of the shaft or luminaire support at the point of test load application between its initially unloaded and fully loaded position.

The top elevation of ground mounted pole foundations shall be set to provide the specified mounting height of luminaires above the top of pavement.

Galvanizing

All steel standards shall be hot dipped galvanized after fabrication in accordance with the requirements of Section M-7.4(d). After erection, standard shall be inspected for scratches in the galvanized surfaces. Such scratches shall be given two coats of a zinc-rich base paint. Second coat shall be applied after first coat has completely dried.

INCINERATOR

1- Capacity - 125 pounds per hour - Firebox shall be large enough to hold the contents of one 55 gallon drum.

2- Outside casing shall be constructed of 12 gage steel reinforced and stiffened with 2 inch angle iron minimum.

3- Stack shall be of 12 gage steel minimum and at least 10 ft. high. It shall be lined with a 2 inch thick (minimum) refractory lining. Inside diameter shall be a minimum of 10 inches.

4- Incinerator shall be lined with 1 inch high temperature block insulation and 3 inch abrasion resistant light weight insulating castable anchored to steel casing or 4 inch dense castable refractory steel mix.

5- Clean out doors and grates shall be heavy cast iron. The charging door shall be counterweighted for ease of operation and shall be top mounted or inclined for ease of emptying refuse cans directly into fire-box. Charging door shall have 3 inch refractory lining or be provided with an inner flame protection liner.

6- Incinerator shall be painted with one coat of high temperature rust inhibiting primer and one coat of heat resistant paint or two coats of high temperature aluminum paint.

7- Burner shall be equipped to burn Liquid petroleum gas. It shall have a minimum input of 250,000 BTU and provided with a spark ignition. A steel enclosure to protect LP gas and burner controls shall be provided and welded to the incinerator.

8- Incinerator shall be guaranteed to produce no objectionable odors or fly-ash.

9- The unit shall be mounted on a six inch thick reinforced concrete slab which shall extend a minimum of 6 inches in all directions around the unit and extend a minimum of 12 inches on sides of unit where cleanout doors are located.

Method of Measurement

The item special "Incinerator" and all appertainances as detailed and specified on the plans shall be considered as one unit. The number of units to be paid for shall be the number of each unit, listed and estimated separately, complete and accepted.

Basis of Payment

The work included in this item shall be paid for at the contract unit price bid for each "Item Special, Incinerator" completed and accepted. Which price and payment shall constitute full compensation for furnishing, preparing, placing and installing all materials, and for all labor, equipment, tools and incidentals necessary to complete this item as shown and specified on the plans.

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PAVEMENT SUMMARY

Station To Station	Side	Reinforced Portland Cement Concrete Pavement	Subbase Grading "A" or "B"		Water-proofed Aggregate Base Course	Aggregate Base Course	Bituminous Surface Treatment Using .25 Gal./S.Y. & .008 C.Y./S.Y.		Drainage Connection Using No.6 Aggregate	Concrete Curb Standard Type 6		Concrete Curb Standard Type 8	Concrete Curb Standard Type 8 (Modified)	Portland Cement Median Pavement	Compacted Subgrade
		Item T-71	Item I-22		Item B-21	Item B-19	Item T-31		Item Spec.	Item I-12				Item I-21	Item E-1
		9"	6"	5" Avg.	6"	3"								9"	
		Sq.Yd.					Gal.	Cu.Yd.	Cu.Yd.	LIN. Ft.				Sq.Yd.	
130+59.30-171+26.15	Lt.	9,808	11,926	1,443	3,261	1,954	929.5	29.7	243	542		523	1,689	27	13,295
135+99.38-176+58.70	Rt.	9,768	11,836	1,564	3,259	1,955	929.5	29.7	197	542		523	1,583	27	13,244
Totals			23,762	3,007	6,520	3,909									
Conversions			3,960	418	1,087	326	1859	60							
To General Summary		19,576	4378		1,087	326	1859	60	440	1084		1,046	3,272	54	26,539

DRAINAGE SUMMARY

* See Field Drains in General Notes

Station To Station	Side	Class B-1	Class A-1	Class A-1 Sec. M6.4d	Class A-1 M6.4d or M6.6b	Class J-1	Class J-1 Sec. M-6.6b or 6.8b		Class E-4		Class F-4		Class H-2		Class I-3	Class B-1		Pipe Specials Cl. I-3 6"x45° Bend Cl. F-4	6"x30° Wye	6"x45° Wye	6"x60° Wye		Masonry Class "C"	Catch Basins No. 2-5 Modified	No. 2-14 Inlet	No. 2-18 Inlet	No. 5	No. 6	Dumped Rock Channel Protection	Removal of Existing Structures	Sodding
		8"	42"	42"	48"	12"	15"	15"	4"	6"	6"	8"	6"	8"	6"	6"															
		Item I-1																Item I-5					Item I-2	Item I-8					Item I-10	Item S-24	Item L-10
		Lin. Ft.																Each					Cu.Yds.	Each					Cu.Yd.	Lump	Sq.Yds.
130+59.3 to 52+00	Lt.														2140				2												
136+00 to 48+00	Rt.														1200			1		1											
48+00 to 53+85	Rt.										10				590			1													
50+25 to 53+50	Rt.										10				315			1													
52+00 to 55+57	Lt.										20				345			1													
53+65 to 55+57	Lt.										10				182			1													
54+85 to 69+75	Rt.											10			1485			1													
55+57 to 59+15	Lt.										10				348			1													
55+57 to 56+85	Lt.										10				117			1			1										
59+15 to 169+55	Lt.														1040																
169+62 to 171+25	Lt.														163				1												
70+24 to 70+50	Rt.											10			20																
55+57	Lt.						92																.26					2			8
142+57.5	Lt.						52																.26					1			
53+52.27	Rt.						68																.26			1					
53+85	Rt.					30																	.26		1						28
148+77	L.&R.									192						105															
154+77	Rt.			10	70																		8.5	1					12.5	Lump	12.4
154+77	Lt.		250	10																			7.3	1							12.4
164+57	Rt.						50																.26					1			
168+00	Lt.																										1				
160+50 to 165+47.39	Lt.						412	100															.26				1	1			
* Estimated		50									50	50	50	50																	
To Erosion Control																															61
To General Summary		50	250	20	70	30	674	100		192	120	70	50	50	7945	105		8		5			17.4	2	1	1	2	5	12.5	Lump	

GUARD RAIL & SIDEWALK SUMMARY

Station to Station	Side	Concrete Sidewalks	Concrete Sidewalks	Guard Rail Steel Beam Type (Deep)
		4"	7"	
		Item I-13		Item I-15
		Sq. Ft.		Lin. Ft.
150+05 to 153+90	Rt.	3,240	1,260	
153+28 to 157+13	Lt	3,240	1,260	
170+00 to 171+00	Lt.			100
171+50 to 172+87.5	Rt.			137.5
54+25 to 55+37.5	Rt.			112.5
Totals To General Summary		6,480	2,520	350

REMOVALS

Note ** Included in Item E-1

Station to Station	Side	Removal of Existing Paved Berm	Pipe Removed Over 15"	Removal of Existing Structure
			Item E-12	Item S-24
		Sq.Yds.	Lin. Ft.	Lump
168+00	Lt.		12	Lump
136+00 to 145+04	Rt.	1004.4		
163+62.7 to 176+59	Rt.	1439.9		
130+59 to 143+55.3	Lt.	1440.8		
162+15 to 171+29	Lt.	1015.6		
To General Summary		**4,901	12	Lump

REST AREA FENCE

Station to Station	Side	Lin. Ft.
145+50 to 149+32	Rt	790.66
145+50 to 150+66.6	Lt.	520.1
149+32 to 149+32	Rt	230
149+32 to 156+98	Rt	766
150+66.6 to 150+63.3	Lt.	397.03
150+63.3 to 157+98	Lt.	735.77
156+98 to 156+98	Rt	230
156+98 to 162+00	Rt	505.6
157+98 to 157+98	Lt.	330
157+98 to 161+30	Lt.	335.1
Total To General Summary		4,840.26

PAINTING SUMMARY

Station To Station	Side	4" Edge Line	4" Lane Line	8" Channel Line	Curbs & Islands	Diagonal Stripes	Parking Lot Stall Marking
		Item I-125					
		Lin. Ft.	Lin. Ft.	Lin. Ft.	Lump	Lump	Lump
30+59.30 to 46+82.44	Lt.	1,623					
35+99.38 to 44+02.71	Rt.	804					
138+25 to 141+00	Lt.		275				
139+37.5 to 141+75	Rt.		237				
141+00 to 142+59.3	Lt			159			
41+25 to 44+00.71	Rt.					Lump	
141+75 to 144+04.32	Rt.			229			
141+75 to 145+04.32	Rt.			330			
44+00.71 to 45+02.71	Rt.				Lump		
44+02.71 to 49+32.20	Rt.	1,058					
46+82.44 to 52+80	Lt.	1,196					
46+82.44 to 49+40	Lt.				Lump		
49+32.20 to 54+18	Rt.						Lump
52+78 to 57+87	Lt.						Lump
53+41 to 60+35.56	Lt.	1,390					
57+87 to 63+13.04	Lt.	1,052					
58+40 to 64+57.80	Rt.				Lump		
60+35.56 to 76+58.70	Lt.	1,623					
162+11.37 to 165+50	Lt.			339			
62+13.04 to 63+15.04	Lt.				Lump		
163+11.37 to 165+50	Lt.			239			
63+13.04 to 71+26.15	Lt.	813					
63+15.04 to 65+50	Lt.					Lump	
164+58.70 to 166+00	Rt.			141			
165+50 to 167+87.5	Lt.		238				
166+00 to 168+75	Rt.		275				
Sub-Totals		9559	1,025	1,437			
Conversions		1.810	0.194	0.272			
To General Summary		1.810	0.194	0.272	Lump	Lump	Lump

EROSION CONTROL

Station To Station	Side	Sodding	Seeding & Protecting	Jute Matting	Commercial Fertilizer (12-12-12)	Agricultural Liming Material
		Item L-10	Item L-9	Item L-120	Item L-9	Item L-9
		Sq. Yds.			Tons	
56+05 to 56+25	Rt.	20				
165+00 to 168+00	Lt.			344.4		
170+32 to 171+00	Lt.			51.9		
165+00 to 169+00	Rt.			459.2		
169+00 to 173+50	Rt.			333.5		
Net Seeding Area	Rt.&Lt.		135,269		12.09	60.5
From Drainage Summary		61				
To General Summary		81	135,269	1,189	12.09	60.5

DELINEATORS

POST MOUNTED

Station to Station	Side IR 70	TYPE C-2 RAMP "A" Side Rt.	RAMP "A" Side Lt.	RAMP "B" Side Rt.	RAMP "B" Side Lt.	RAMP "C" Side Rt.	RAMP "C" Side Lt.	RAMP "D" Side Rt.	RAMP "D" Side Lt.	TYPE C-3 RAMP "B" Side Rt.	TYPE C-3 RAMP "C" Side Lt.
136+00 to 142+00 (on ℄)	Rt.	7									
54+60 to 58+60 (on ℄)	Rt.				5						
58+60 to 176+60 (on ℄)	Rt.			18						1	
130+60 to 147+60 (on ℄)	Lt.						17				1
147+60 to 52+60 (on ℄)	Lt.					6					
165+30 to 171+30 (on ℄)	Lt.								7		
Total to General Summary		60								2	

Note: See Sht. No. 44 for spacing of delineators and Sht. No. 4 for details

CALCULATIONS

Seeding Calculations:

Gross Seeding Area (E.P. I.R. 70 to Prop L/A) 163,100 Sq. Yds.

Deductions:
Compacted Subgrade 26,539
Median Pavement 54
Sidewalk 1,104 " "
Bldgs. 134 " "
Total Deduction 27,831 Sq. Yds.

Net Seeding Area 135,269 Sq. Yds.
Add for Sodding 81 Sq. Yds
Fertilizer (12-12-12) 20#/1000 ft² 135,350 x .00009 = 12.2 Tons
Liming Material 100#/1000 ft² 135,350 x .00045 = 60.9 Tons

Water Calculations:

Embankment +15% 29,670 Cu. Yds.
I-22 4,378 " "
B-19 326 " "

Total 34,374 Cu. Yds.
5 gal./C.Y.
34,374 x .005 = 17.2 M-Gal.

Earthwork Summary:
Sta 130+59.3 to Sta 176+58.7

Excavation 61,538 Cu. Yds.
Embankment 25,800 " "
Embankment +15% 29,670 " "

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SUB-SUMMARY

100% State Funds

* Property Corner Monument

GENERAL SUMMARY

ITEM			TYPE CODE Y021		GRAND TOTAL	UNIT	DESCRIPTION TYPE CODE Y021
							ROADWAY
E- 1			61,538		61,538	Cu. Yds.	Roadway Excavation, Method "B", As Per Plan.
E- 1			26,539		26,539	Sq. "	Compacted Subgrade.
E- 9			Lump		Lump	Lump	Removal of Trees and Stumps, As Per Plan.
E- 11			172		172	M-Gal.	Water
I- 4			1		1	Ton	Calcium Chloride for Dust Control.
I- 8			2		*2	Each	Centerline Reference Monuments, As Per Plan.
I- 13			6,480		6,480	Sq. Ft.	4" Concrete Sidewalks.
I- 13			2,520		2,520	" "	7" Concrete Sidewalks.
I- 15			350		350	Lin. Ft.	Guard Rail Steel Beam Standard Type (Deep).
I- 25			4840		4840	" "	Rest Area Fence Type 47.
I- 26			264		264	" "	Chain Link Fence, 42" high.
I- 26			2		2	Each	Chain Link Fence Gate, 42" high, 4' wide.
I-125			1,810		1,810	Miles	4" Edge Lines.
"			0.194		0.194	"	4" Lane Lines.
"			0.272		0.272	"	8" Channelizing Lines
"			Lump		Lump	Lump	Curb and Island Marking.
"			"		"	"	Diagonal Stripes.
"			"		"	"	Parking Lot Stall Marking.
I-127			60		60	Each	Delineators Type C-2 Post Mounted.
I-127			2		2	"	Delineators Type C-3 Post Mounted.
L- 6			Lump		Lump	Lump	Roadside Cleanup, Modified, As Per Plan.
L- 7			50		50	Sq. Yds.	Riprap for Tree Protection.
L- 8			25		25	Cu. Yds.	Aggregate for Tree Root Aeration.
L- 9			135350		135350	Sq. "	Seeding and Protecting, As Per Plan.
"			12		12	Tons	Commercial Fertilizer (12-12-12)
"			61		61	"	Agricultural Liming Material.
L- 10			81		81	Sq. Yds.	Sodding
L- 13			472		472	Each	Ligustrum o. regelianum (Regel Border Privet) 24"-30" B+B (12")
"			164		164	"	Rhamnus frangula (Glossy Buckthorn) 3'- 4' B&B (13")
"			292		292	"	Euonymus alatus compacta (Dwarf Winged Euonymous) 24"-30" B+B (12")
"			32		32	"	Ligustrum buxus nana (Dwarf Wintergreen Privet) 24"-30" B&B (16")
"			24		24	"	Taxus cuspidata capitata (Upright Japanese Yew) 5'- 6' B&B (19")
"			12		12	"	Taxus cuspidata nana compacta (Compact Japanese Yew) 24"-30" B&B (13")
"			206		206	"	Chaenameles japonica (Japanese Flowering Quince) 24"- 30" B&B (12")
"			25		25	"	Taxus cuspidata (Spreading Japanese Yew) 4'- 5' B&B (21")
L- 14			12		12	"	Acer rubrum (Red Maple). 1½"- 1¾" B&B (20")
"			6		6	"	Tilia cordata (Little Leaf Linden). 1½"- 1¾" B&B (20")
"			5		5	"	Liriodendron tulipifera (Tulip Tree). 1½"- 1¾" B&B (20")
"			15		15	"	Malus hopa (Red Flowering Crab). 5'- 6' B&B (16")
"			14		14	"	Malus p. eleyi (Eley Purple Crab). 5'- 6' B&B (16")
"			17		17	"	Malus atrosanguinea (Carmine Crab). 5'- 6' B&B (16")
"			39		39	"	Crataegus oxycantha pauli (Pauls Double Scarlet Hawthorn) 5'-6' B&B (16")
"			1		1	"	Quercus palustris (Pin Oak). 1½" 1¾" B&B (20")
L- 17			Lump		Lump	Lump	Pruning Existing Trees, As Per Plan.
L-120			1,189		1189	Sq. Yds.	Jute Matting.
S-25			1320		1320	LIN. FT.	2/c No. 4 Cable Duct.
S- 25			2		2	Each	Light Standards - Ramps.
"			4		4	"	Light Standards - Speed Change Lanes.
"			6		6	"	Light Standards - Island - Twin.
"			10		10	"	Light Standards - Picnic Area.
"			6		6	"	Concrete Pole Foundations - Ramps and Speed Change Lanes.
"			6		6	"	Concrete Pole Foundations - Islands.
"			10		10	"	Concrete Pole Foundations - Picnic Area.
"			18		18	"	Luminaires - Ramps, Islands and Speed Change Lanes.
"			10		10	"	Luminaires - Picnic Areas.
"			6		6	"	Concrete Pull Boxes.
"			2		2	"	Service Poles, As Per Plan.
"			2550		2550	Lin. Ft.	No. 2/0 A.W.G. Circuit Cable, Single Conductor.
"			6725		6725	" "	No. 4 A.W.G. Circuit Cable, Single Conductor.
"			2000		2000	" "	No. 12 A.W.G. Circuit and Bracket Cable, Single Conductor.
"			1328		1328	" "	3" Conduit - Lighting.
"			2070		2070	" "	2" Conduit - Lighting
"			# 890		890	" "	1½" Conduit - Telephone
S- 25			1280		1280	" "	Trenching and Backfill For Cable Duct.
Special			2		2	Each	Incinerator
Special			2		2	Each	Roadside Toilet and Storage Unit.
"			2		2	"	Aerobic Sewage Treatment Plant and 600 Gallon Trash Trap
"			2		2	"	Sewage Chlorination Unit.
"			2		2	"	Pressure Water System
"			28		28	"	Picnic Table with Concrete Slabs.
"			10		10	"	Charcoal Grills and Serving Tables
"			2		2	"	Shelter House
T- 10			39		39	Cu. Yds.	Traffic Compacted Surface Course for Maintaining Traffic
"			21		21	" "	Traffic Compacted Surface Course, Using No. 34 Aggregate, for Maintaining Traffic, As Per Plan.
							DRAINAGE
I- 1			105		105	Lin. Ft.	6" Pipe, Class B-1
"			192		192	" "	6" Pipe, Class E-4
"			120		120	" "	6" Pipe, Class F-4
"			50		50	" "	6" Pipe, Class H-2
"			7945		7945	" "	6" Pipe, Class I-3
"			50		50	" "	8" Pipe, Class B-1
"			70		70	" "	8" Pipe, Class F-4, Sec. M-6.4 (c)
"			50		50	" "	8" Pipe, Class H-2
"			30		30	" "	12" Pipe, Class J-1
"			674		674	" "	15" Pipe, Class J-1
"			100		100	" "	15" Pipe, Class J-1, Sec. M-6.6 (b) or 6.8 (b)
"			250		250	" "	42" Pipe, Class A-1
"			20		20	" "	42" Pipe, Class A-1, Sec. M-6.4 (d)
"			70		70	" "	48" Pipe, Class A-1, Sec. M-6.6 (b) or Sec. M-6.4 (d)
I- 2			18		18	Cu. Yds.	Masonry
I- 5			8		8	Each	6" Pipe Specials, Class F-4
I- 5			5		5	"	6" Pipe Specials, Class I-3
I- 8			2		2	Each	Standard No. 25 Catch Basin, Modified, As Per Plan.
"			2		2	"	Standard No. 5 Catch Basin
"			5		5	"	Standard No. 6 Catch Basin
"			1		1	"	Standard No. 2-14 Median Inlet
"			1		1	"	Standard No. 2-18 Median Inlet
I- 10			125		125	Cu. Yds.	Dumped Rock Channel Protection
S- 24			Lump		Lump	Lump	Removal of Existing Structures
							PAVEMENT
B- 19			326		326	Cu. Yds.	Aggregate Base Course
B- 21			1087		1087	" "	Waterproofed Aggregate Base Course, As Per Plan.
T- 31			1859		1859	Gal.	Bituminous Surface Treatment-Bituminous Material, As Per Plan.
"			60		60	Cu. Yds.	Bituminous Surface Treatment-No. 6 Aggregate.
T- 71			19576		19576	Sq. Yds.	9" Reforced Portland Cement Concrete Pavement.
I- 12			1046		1046	Lin. Ft.	Concrete Curb, Standard Type 8.
I- 12			3272		3272	" "	Concrete Curb, Standard Type 8, Modified, As Per Plan.
I- 12			1084		1084	" "	Concrete Curb, Standard Type 6.
I- 21			54		54	Sq. Yds.	9" Portland Cement Concrete Median Pavement.
I- 22			4378		4378	Cu. Yds.	Subbase, Grading "A" or "B", As Per Plan.
Special			440		440	" "	Drainage Connection Using No. 6 Aggregate.
			Lump		Lump	Lump	Construction Layout Stakes.
I- 3			"		"	"	Maintaining Traffic.
			Lump		Lump	LUMP	Field Office

Rev 9-2065

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PREBLE COUNTY
PRE-70-2.47

FED. ROAD DIVISION	STATE	PROJECT
2	OHIO	

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UTILITY OWNERSHIP

Dayton Power & Light - Eaton
Ohio Telephone Service-Eaton
Darke Rural Electric Co-op, Inc.-Greenville.

PREBLE COUNTY
PRE-70-2.47

Ex. Channel Easement ℄ Ex. 5" Tile

Ex. R/W ℄ Eldorn Rd.

Prop. L/A

HW-E Endwall
F/L 1206.30

Ex. L.A.

52'-15" I-1 Class J-1

Ramp "C"

+57.5 - No. 6 C.B.
F/L 15" 1206.70

Exist. 18" Pipe

Sta. 130+59.30
Begin Project Work
S88°-32'-49"E.

131 132 S.88°-32'-49"E. 133 134 ℄ U.S.R. 40 135 136 137 138 139 140 141 142 143 144 145

I-70-1(18)02

Exit 4" Tile

Ramp "A"

32' 10' 24' 15'

4' Paved Berm

Exist. T-71

10' Paved Berm

Ex. 4" Tile

Ex. Field Dr.

Ex. 4" Tile

14"

Ex. 4" Tile
Cut & Plug 1'
inside RW

Needs

B.M. Elev. 1200.31'
60d Spike in Root 36" Oak
Sta 129+75 - 180' Rt.

TYPICAL HALF SECTION
Adjacent to Beginning of Job

Note: All Elevations are based on U.S.G.S. Datum

B.M. Elev. 1212.69'
Spike in 42" Cottonwood
Sta 139+15 - 125' Lt.

1210
1205
1200

0.60 % Profile Grade

Exist. Edge Of Pavement Profile

1203.34 1203.64 1203.94 1204.24 1204.54 1204.84 1205.14 1205.44 1205.74 1206.04 1206.34 1206.64 1206.94 1207.24 1207.54 1207.84 1208.14 1208.44 1208.74 1209.04 1209.34 1209.64 1209.94 1210.24 1210.54 1210.84 1211.14 1211.44 1211.74 1212.04 1212.34 1212.64

131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146

STA 131+00 TO STA 146+00

PREBLE COUNTY
PRE-70-24T

Connect prop. 6" pipe with exist. 5" tile 1' inside prop. L/A

Exist. 5" Tile (To be replaced)

84'-6"I-1, Class E-4

Ex. L/A

Prop. L/A

* Note: Reduce Curb Ht. From 9" to 2" in 15'

* See Note

92'-15"I-1, Class J-1

No. 6 C.B. F/L 1208.8'

250'-42" Class A-1

120' Lt. No. 2-5 C.B. Mod.

HW-E Endwall, F/L 1208.7'

10'-42" Class A-1

Struct. Pre 40-0293 Extension Left

146 147 148 149 150 S.88°-32'-49"E. 151 152 ℄ U.S.R 40 153 154 155 156 157 158 159 160

Exist 6" Tile

Exist. 42" C.M.P.

Struct. Pre 40-0293 Extension Rt.

Note: These two monuments shall be witnessed and referenced by contractor before work is begun. See note on R/W PLANS.

150+69.49 156.68 Rt. Mon.

151+49.31 156.10 Rt. Mon.

131.5' Rt. No. 2-5 C.B. Mod.

10'-42" Class A-1 M6.4(d)

30"-12"I-1 Class J-1

HW-E Endwall

No. 2-18 Med. Inlet F/L 1203.7

105'-6"I-1, Class B-1

Exist 5" Tile. (To be replaced)

Connect prop. 6" pipe with exist 5" tile 1' inside prop. L/A

No. 2-14 Inlet F/L 1205.5

68'-15"I-1 Class J-1

HW-E Endwall F/L 1204.3

70'-36" Class A

54"x25" 54"x25"

End Sadling

9'X20'

Prop. L/A

B.M. Elev. 1211.06'
Spike in 24" Maple
Sta. 149+25 - 150' Rt.

B.M. Elev. 1209.54'
Spike in 18" Walnut
Sta. 156+80 - 170' Lt.

L A

Connect prop. 6" pipe with exist 5" tile 1' inside prop. L/A

108' 6"I-1 Class E-4

1220
1215
1210

℄ Existing Edge of Pavement Profile

Exist. 42"

146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161

STA. 146+00 To STA. 161+00

PREBLE COUNTY
PRE-70-2.47

L/A

100'-15"T-1, Cl. J-1, Sec. M-6.8(b)
or Cl. A-1, M-6.6(b)

Ex. L/A

Ramp "D"

+50-100'Lt. No.5 C.B.
F/L Grate 1207.00'
F/L 15" 1204.00'

262'-15"T-1, Cl. J-1

150'-15"T-1, Cl. J-1

+00 Begin Jute Matting

+47.39-163'Lt. HW-E Endwall
F/L 15" 1197.00'

Exist. D.R.C.P.

Ex. Channel Easement

Exist. 18" Pipe

+00-107'Lt.
No.5 C.B.

+11.86-No.6 C.B.
F/L 15" 1201.00'

Exist. 18" Pipe

P.I. Sta. 167+21.57
Δ = 0°10'-00" Lt.

Exist. D.R.C.P.

170+32 Begin Jute Matting

171+60 End Jute Matting

Ex. L/A

+00 Begin G.R.

+00 End G.R.

Exist. 36" Pipe

I-70-1 (18)02

Sta. 176+58.70
End Project Work

161 ℄ U.S.R. 40 | 162 | 163 S.88°-32'-49"E. | 164 | 165 | 166 | 167 | 168 | 169 | 170 S.88°-42'-49"E. | 171 | 172 | 173 | 174 | 175 | 176

+57-No. 6 C.B.
F/L 15" 1200.85

Ramp "B"

50'-15"T-1
Class J-1

HW-E Endwall
F/L 1200.70

Ex. L/A

22" 12" 12"

+00 Begin Jute Matting

L/A

Ex. L/A

+50 Begin G.R.

Exist. D.R.C.P.

+80.5 End G.R.

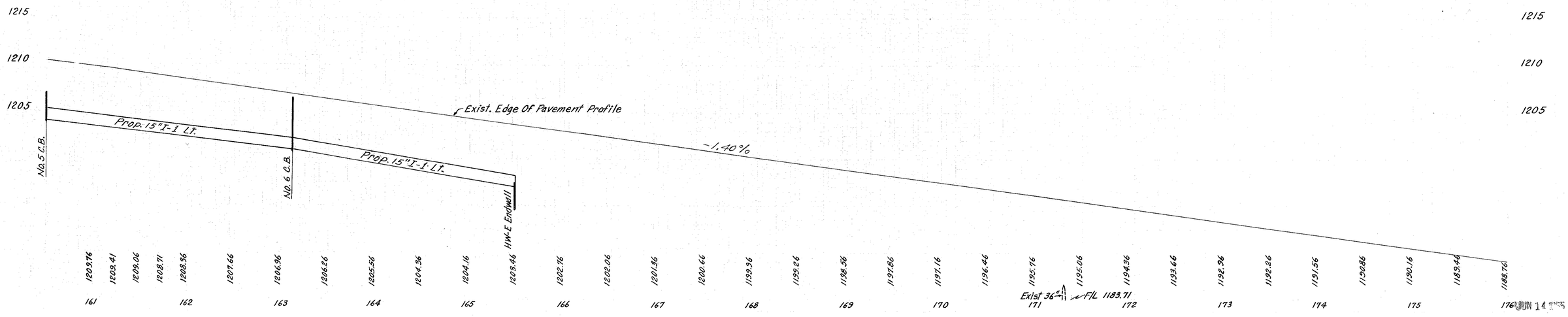
+50 End Jute Matting

10' 4' Paved Berm | 24' Exist. I-71 | 15' 10' Paved Berm

TYPICAL HALF SECTION
Adjacent to end of Job

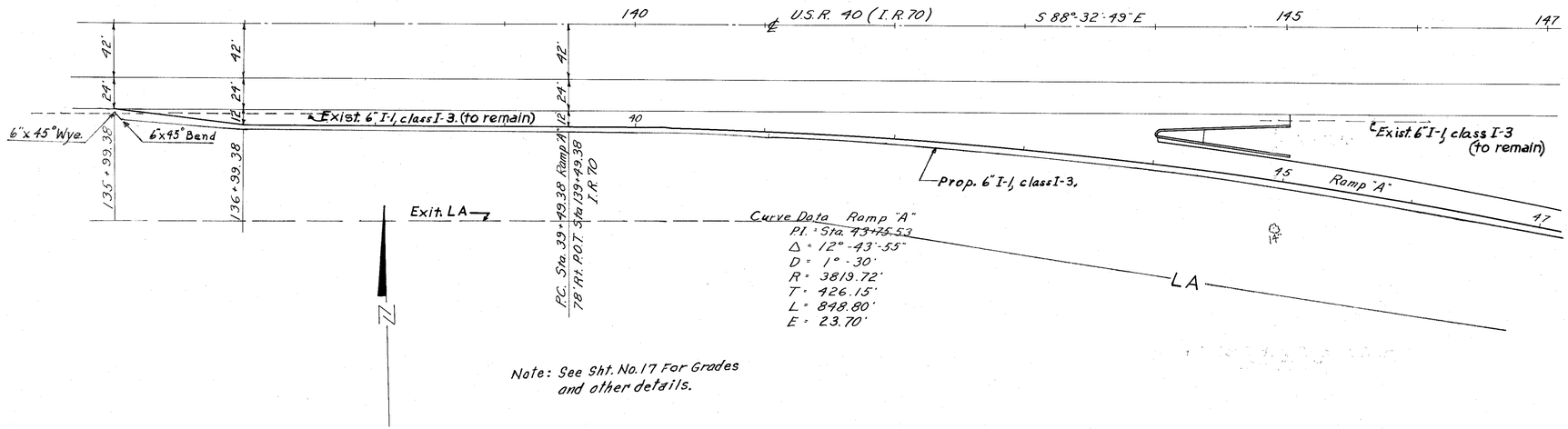
B.M. Elev. 1215.42'
Spike in 18" Hackberry
Sta. 165+30 - 150' Rt.

B.M. Elev. 1186.37'
High Point of Glacial Boulder
Sta. 172+00 - 150' Rt.

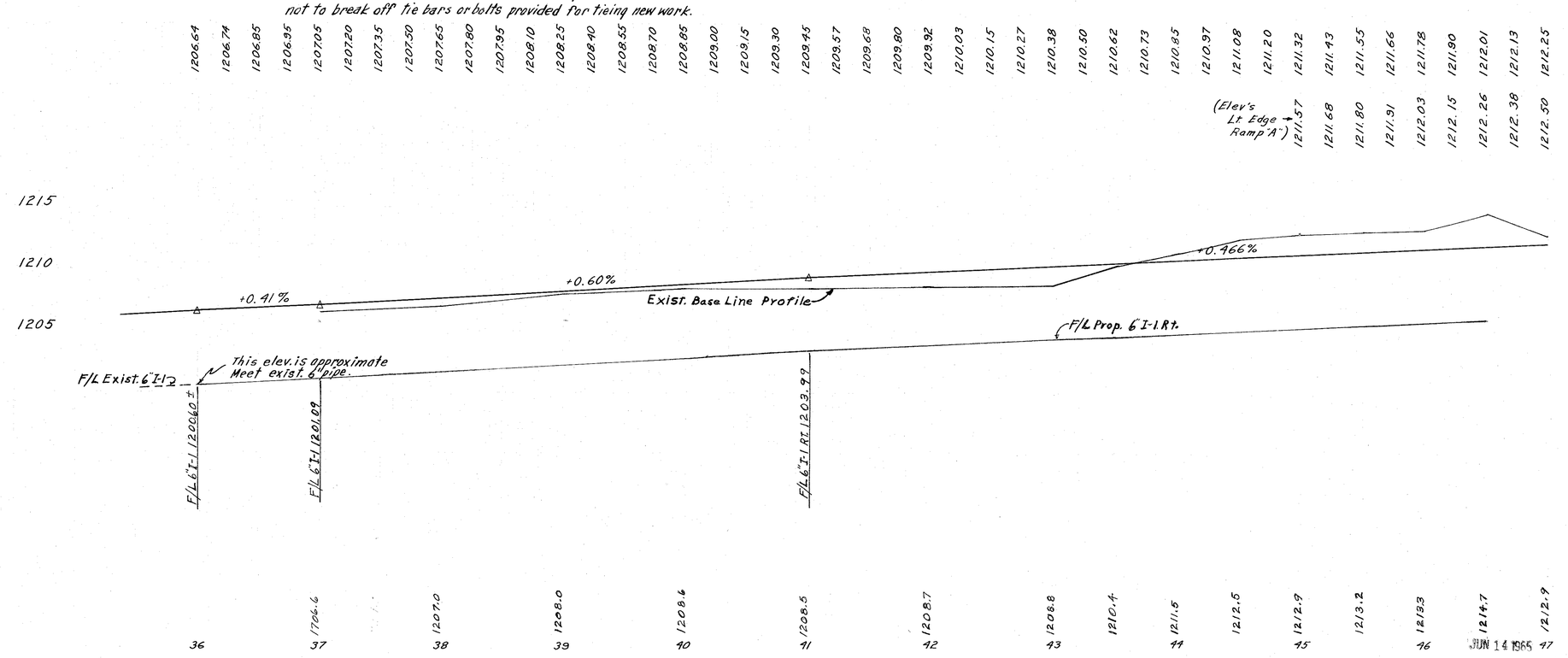


STA 161+00 TO STA 176+00

PREBLE COUNTY
PRE-70-2.47



Note: Exist. 6" underdrain (which is 3' from the outside edge of I.R. 70)
is to remain.
The contractor also shall be carefull during excavation
not to break off tie bars or bolts provided for tieing new work.



JUN 14 1965

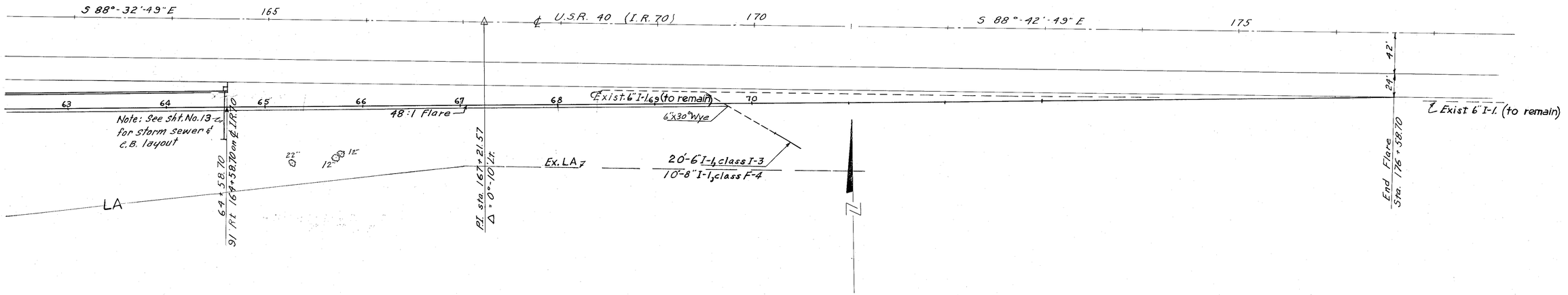
SOUTH REST AREA STA 35+99.38 TO STA 47+00

PREBLE COUNTY
PRE-70-2.47

JUN 14 1965

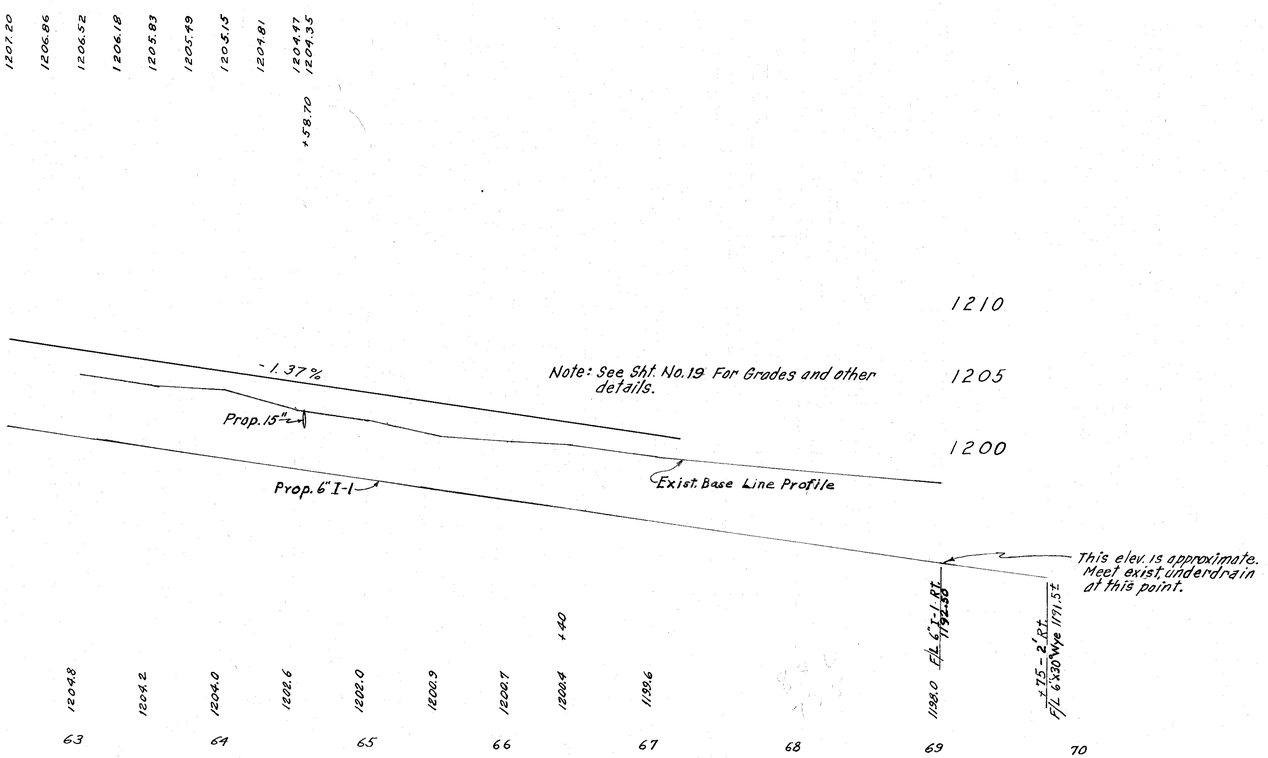
SOUTH REST AREA STA. 47+00 TO STA. 63+00

PREBLE COUNTY
PRE - 70-2.47



Note: Existing 6" underdrain (which is 3' from the outside edge of I.R. 70) is to remain.

The contractor shall also be careful not to break off the tie bars or bolts during excavation that were provided to tie old work to new.



JUN 14 1965

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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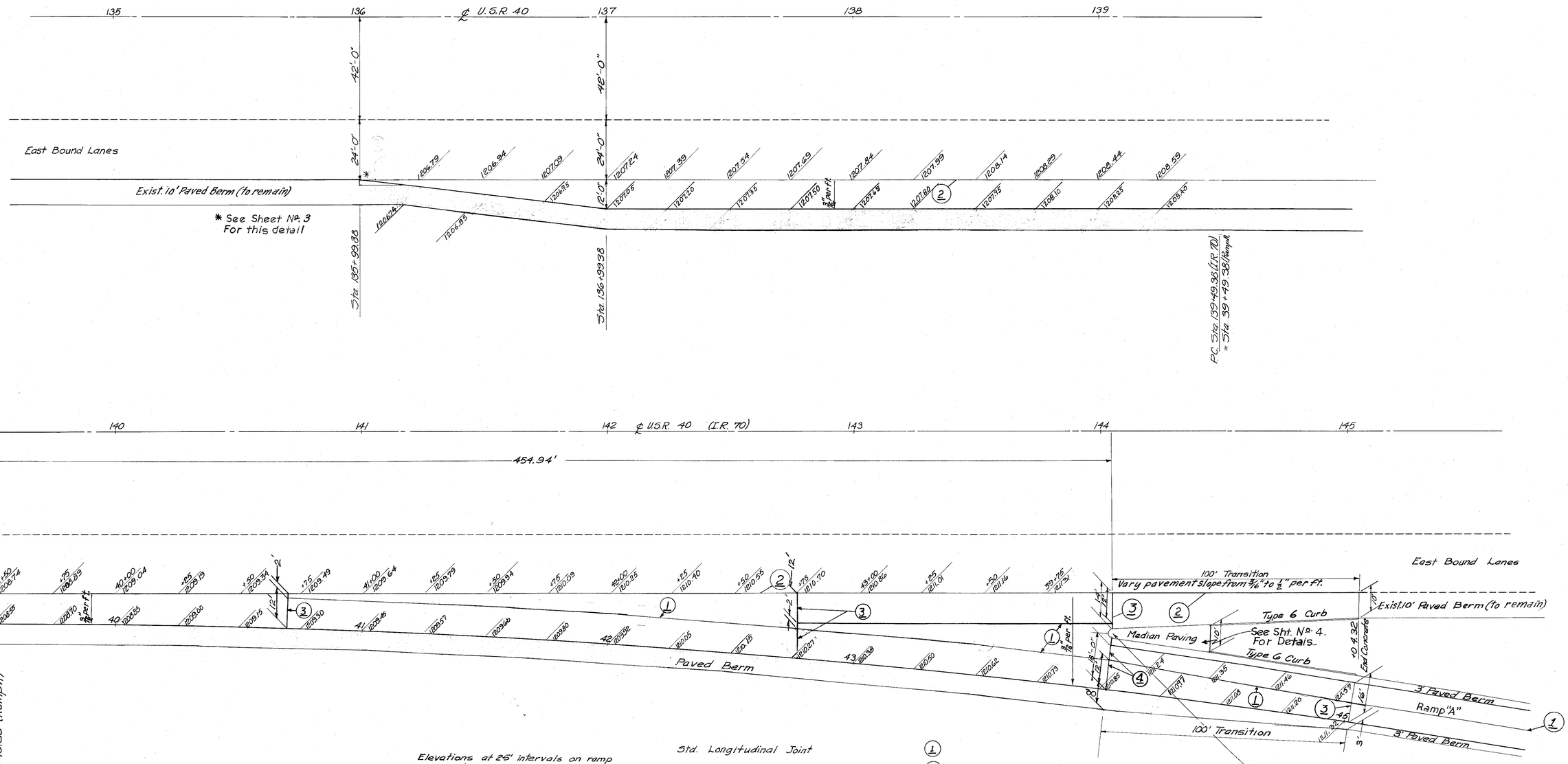
PREBLE COUNTY
PRE-70-247



Elevations at 25' intervals on ramp pavement and main line pavement

Contraction joints shown are "control Joints". Intermediate Contraction Joints shall be uniformly spaced with a max. spacing of 60'

Contraction Joints on curved portions of ramps shall be made radially and those adjacent to main line pavement shall be a straight extension of existing joints.

Std. Longitudinal Joint	(1)
Std. Longitudinal Key Joint	(2)
Std. Contraction Joint	(3)
Std. Expansion Joint	(4)

Note: Grades shown are pavement grades.

JUN 14 1995

PREBLE COUNTY PRE-70-247 SOUTH REST AREA

RAMP "A"

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

20/62

PREBLE COUNTY
PRE-70-2.47

★ Reduce Curb Height from 9" to 2" in 15'

★★ Reduce Curb Height from 9" to 6" in 15'

★★★ Make transition from Type 8 Curb (Mod) to Type 6 Curb Section at the catch basin apron end in ten feet. Cost of transition is included in bid price for Item I-12, Concrete Curb Type 8, Modified as per plan.

Note: Grades shown are pavement grades.

P.T. Sta. 49+32.20

P.C. Sta. 49+32.20
R = 75' to E.P.
Δ = 64°
T = 46.87'

Type 8 Concrete Curb (Mod.)

Ramp "A"

Ramp "B"

Sta. 49+79.07
= 149+11 (L.R.70)

50' R to F.C. +47

+30.58 26' L.T.

160'-0" to ℄

36'-0"

25'-0" to 40'-0"

-2.00%

Type 8 Concrete Curb (Mod.)

Parking 12 Trucks

6" Parking Lines

Parking-32 Cars

No. 2-18 Median Inlet
+85 - F/L 12" 1203.70'

No. 2-14 Median Inlet
+152.27 - F/L 15" 1205.50'

P.T. Sta. 53+98.07 Bk.
= 53+83.35 Ahead
= 153+90 (L.R.70)

HWE Endwall
F/L 1203.1
Prop. 12"

+25.66
50' R to F.C.

+34.01
10' Rt.

+14.21
15' Rt.

+53.27
10' Rt.

+73.07
15' Rt.

Prop. 15"

Δ = 80°12'23"
L = 69.99'

6' x 42' Sodding in 6" deep ditch

H.W.E. Endwall
F/L 1204.5

+101.5
40' Rt.

Type 8 Concrete Curb (Mod.)

5' Sidewalk

6' Sidewalk - 4" Thick

Type 6 Curb

7" Conc. Walk

Well Casing

Roadside Toilet & Storage Unit 1213.00

7" Conc.

℄ Bldg. & Well Casing

Note: For joint legend, see sheet 19.

Shelter House

Chlorinator

Elev. 1207.0

Sewage Treatment Elev. 1207.5

Elev. 1207.0

600 Gal. Trash Trap

6" C.I. Pipe

1212

1214

1194

1196

1198

1200

1202

1206

1208

1210

R/W

JUN 14 1965

PREBLE COUNTY PRE-70-247 SOUTH REST AREA

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

PREBLE COUNTY
PRE-70 -2.47

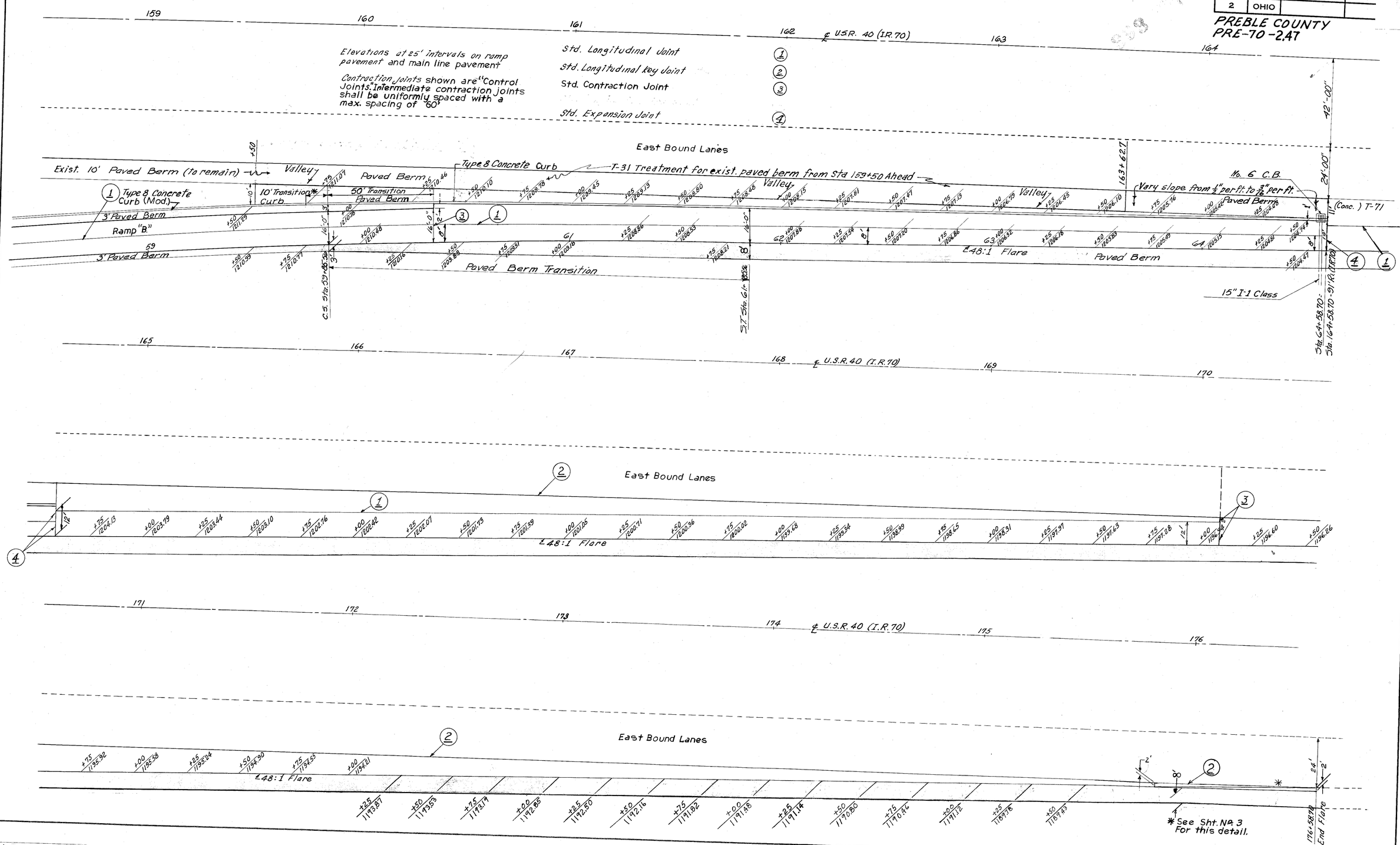
✳ Transition to be paid for under Type 8 Concrete Curb.

Note: Grades shown are pavement grades.

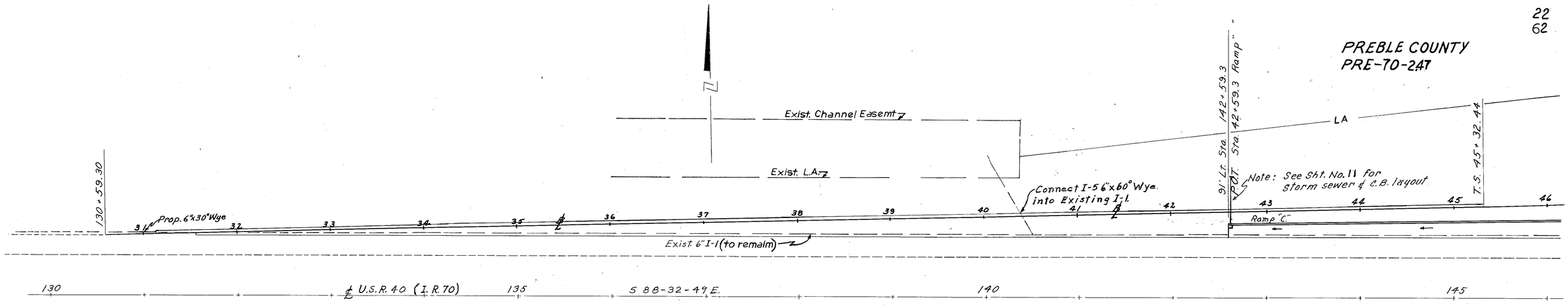
Elevations at 25' intervals on ramp pavement and main line pavement

Contraction joints shown are "Control Joints." Intermediate contraction joints shall be uniformly spaced with a max. spacing of 60'

Std. Longitudinal Joint (1)
Std. Longitudinal key Joint (2)
Std. Contraction Joint (3)
Std. Expansion Joint (4)

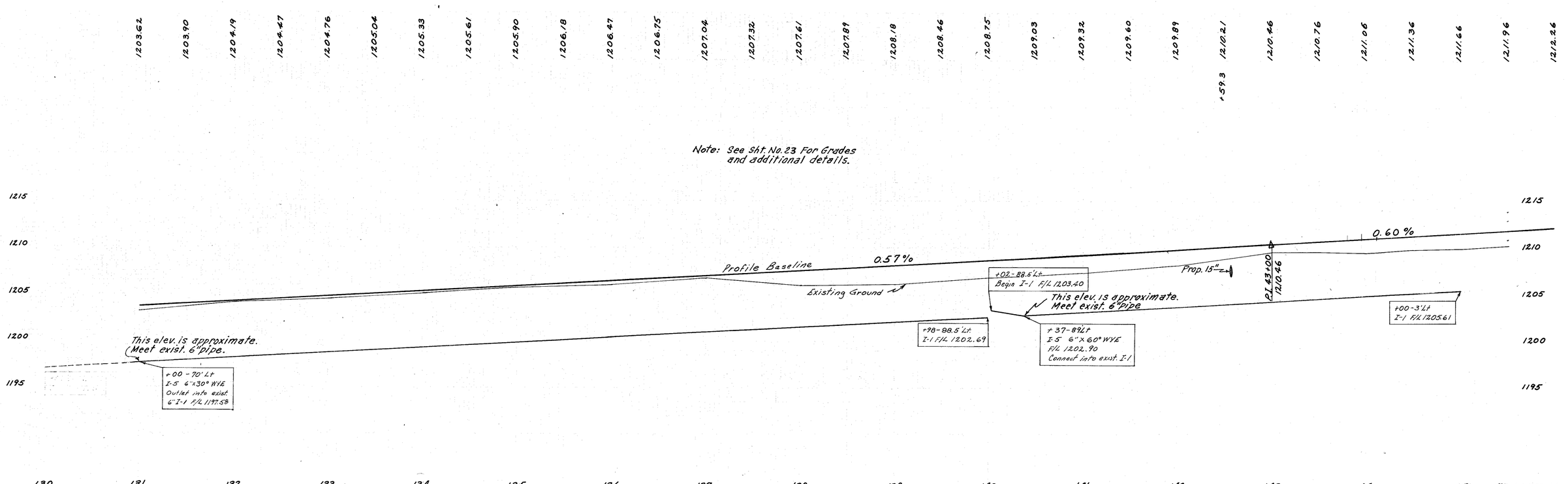


PREBLE COUNTY
PRE-70-247



Note: Existing 6" Underdrain (which is 3' from the outside edge of I.R. 70) is to remain.

The contractor shall also be careful when excavating not to break the tie bars or bolts that have been provided to tie Exist. Pavement to new.



JUN 14 1965

NORTH REST AREA STA. 130+00 TO STA. 146+00

PREBLE COUNTY
PRE-70-2.47

Ramp "C" Curve Data
P.I. = 46+65.78
θ_s = 2°
L_s = 200'
LT = 133.34'
ST = 66.67'

Ramp "C" Curve Data
P.I. = 48+97.62
Δ = 6°-36'
D = 2°
R = 2864.79'
T = 165.18'
L = 330.00'

Ramp "D" Curve Data
P.I. = 58+53.30
Δ = 12°-43'-22"
R = 603.11'
D = 9°-30'
L = 133.92'
T = 67.24'

* Note: Reduce Curb Ht. from 9" to 2" in 15'

L A

S 1°-27'-11" W.

L A

L.A.

T.S. 45+32.44

S.C. 47+32.44

P.T. 50+62.44

P.I. 48+43.36
Δ = 6°-36' Lt.

See Note*

49+40

R=50'

R=90'

Δ = 9°-47'-37" Rt.
53+34.45 Bk.
53+20.19 Ahead
153'28 ℄ I-71

6" C.I. Pipe

No. 6 C.B. F/L 1209.1'

6"x45° Bends
12"-15"-6" T-1, Cl. F-4

10'-6" T-1, Cl. F-4 16"

No. 6 C.B. F/L 1208.91'

6"x45° Bends
10'-6" T-1, Cl. F-4 (each outlet)
HW-E Endwall
F/L 1208.7'
6'x12' Sodding

10'-6" I-1, Cl. F-4
(over 42" pipe)

Struct. Pre 40-0293
Extension Left

Ex. 42" C.M.P.

R=75'
Δ=64°

R=50'

PC 56+86.06

See Note

P.I. 58+53.30

P.R.C. 59+19.98

S. 88°-32'-49" E.

℄ U.S. R. 40

45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61

145 150 155 160

12.2.26 12.2.56 12.2.86 Rt. Edge 12.3.16 12.3.46 12.3.76 12.4.06 12.4.36 12.4.66 12.4.96 12.5.26 12.5.56 12.5.39 12.5.12 12.4.63 12.2.89 Rt. Edge 12.2.62 12.2.87 12.2.43 12.1.77 12.1.11 12.0.70

12.3.41 12.3.71 12.4.01 12.4.31 12.4.61 12.4.91 12.5.21 12.5.51 12.5.39 12.5.00

1225 1220 1215 1210 1205 1200 1195

Existing Ground

Profile Baseline

+0.60%

-1.24.8%

+0.4%

-1.32%

200' V.C.

100' V.C.

P.I. 52+00
El. 12.5.56

P.I. 58+00
El. 12.13.09

+00-19' Rt.
Begin 6" I-1
F/L 1211.79

+00-3' Lt.
End 6" I-1
F/L 1209.34

+00-3' Lt. Begin
6" I-1 F/L 1205.61

+65-33' Lt.
Begin 6" I-1
F/L 1211.00

+85-33' Lt.
End 6" I-1
F/L 1210.00

+57 F/L C.B. Rt. 1208.91
F/L C.B. Lt. 1209.10

See Sht. No. 24 For Grades and other details

STATION EQUATION
53+1206 Ahead Ramp "C"
53+34.45 Back Ramp "C"

Prop. 42"

F/L 6" Rt. 1209.15

F/L 6" Rt. E&W. 1206.90

+15-19' Rt.
Begin 6" I-1
F/L 1209.70'

+15-3' Lt.
Begin 6" I-1
F/L 1206.38

+00-3' Lt.
6" I-1
F/L 1204.40

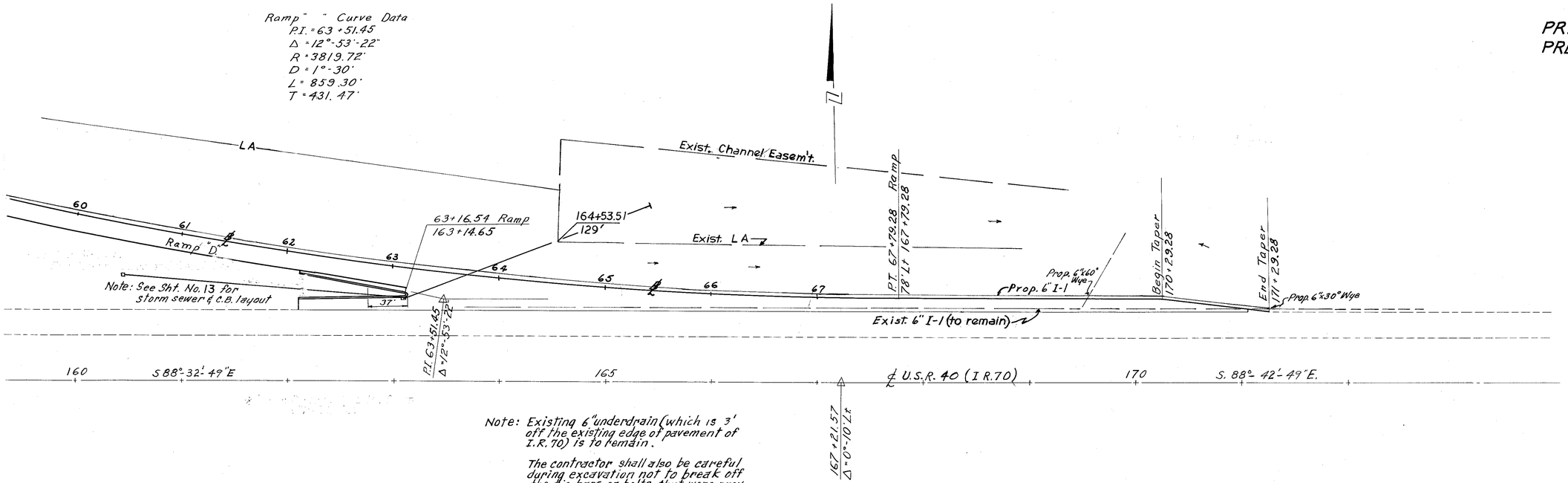
45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

JUN 14 1965

NORTH REST AREA STA 46+00 TO STA 60+00

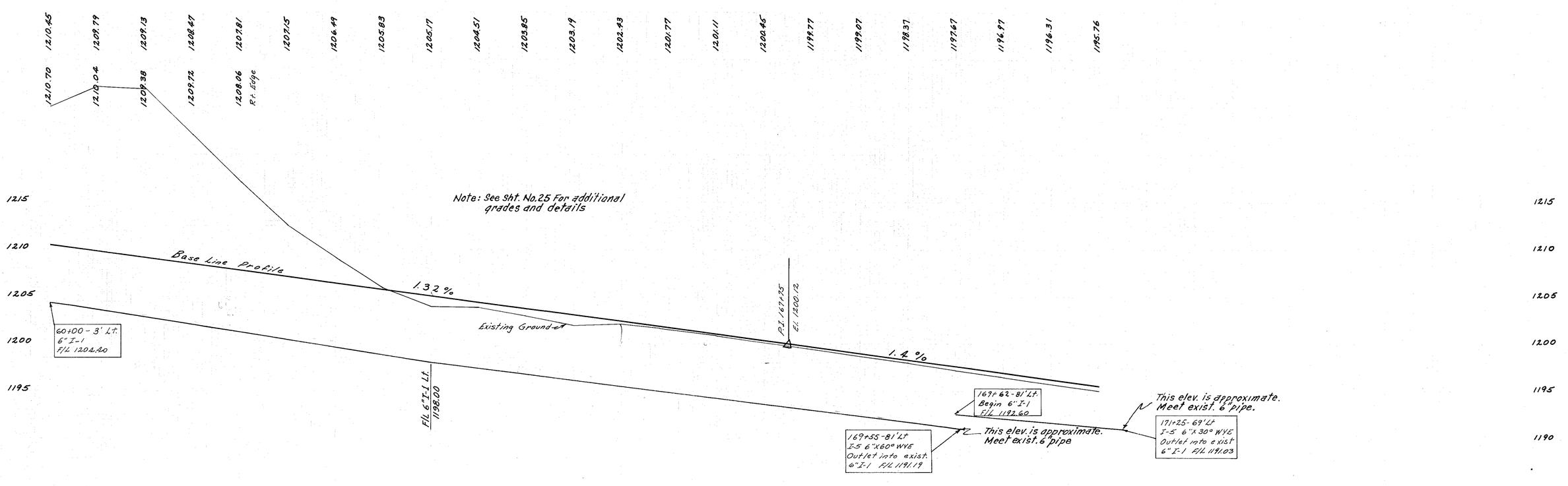
PREBLE COUNTY
PRE-70-2.47

Ramp " " Curve Data
P.I. = 63 + 51.45
Δ = 12°-53'-22"
R = 3819.72'
D = 1°-30'
L = 859.30'
T = 431.47'



Note: Existing 6" underdrain (which is 3' off the existing edge of pavement of I.R.70) is to remain.

The contractor shall also be careful during excavation not to break off the tie bars or bolts that were provided to tie existing pavement to new



JUN 14 1965

NORTH REST AREA STA.60+00 TO STA.172+00

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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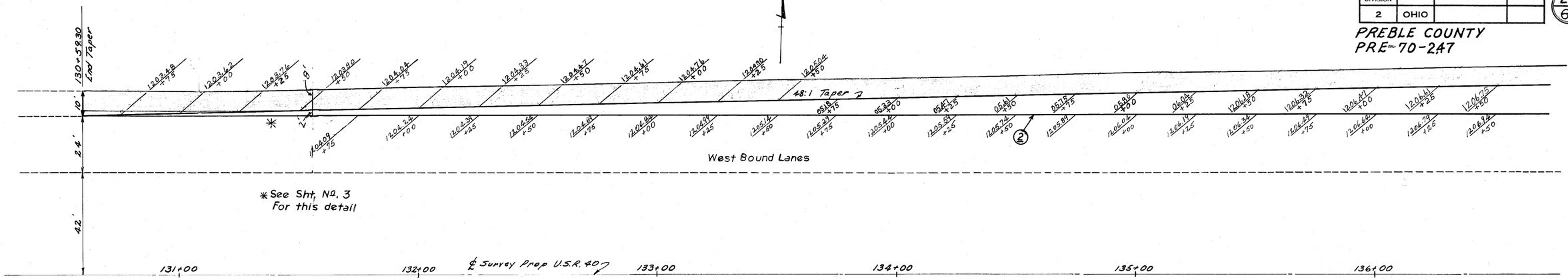
PREBLE COUNTY
PRE 70-247



LEGEND

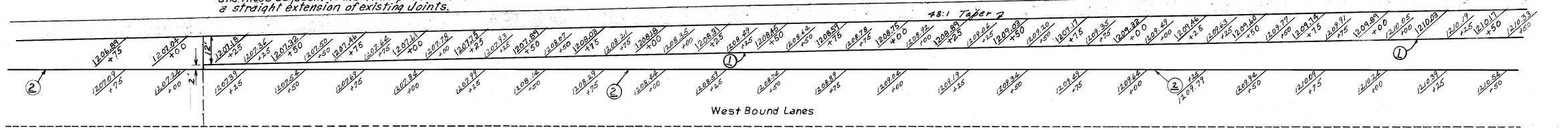
1. Standard Longitudinal Joint
2. Standard Key Joint
3. Standard Contraction Joint
4. Standard Expansion Joint

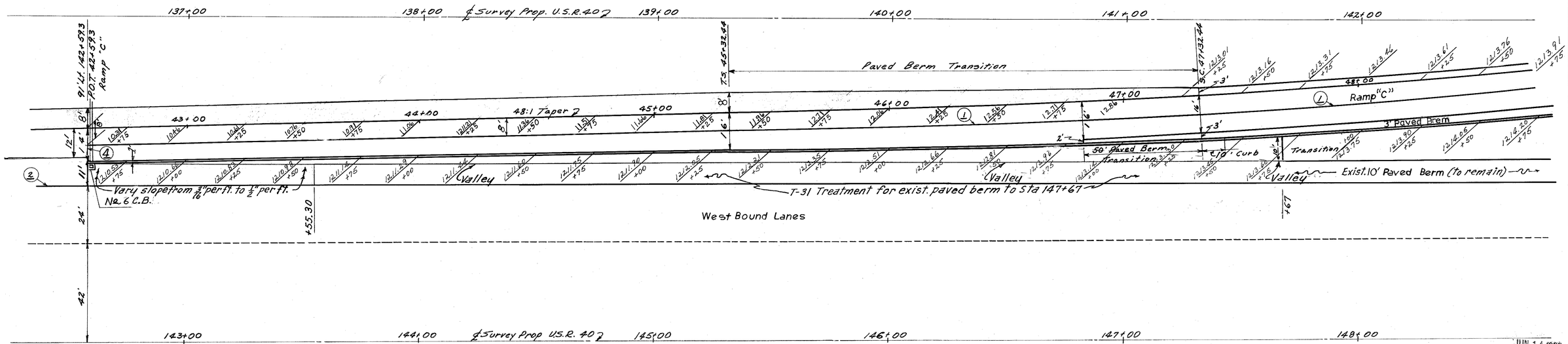
Elevations at 25' intervals on ramp pavement and main line pavement

Contraction Joints shown are "control Joints." Intermediate Contraction Joints shall be uniformly spaced with a max, spacing of 60'

Contraction Joints on curved portions of ramps shall be maderadially and those adjacent to main line pavement shall be a straight extension of existing joints.

Note: Grades shown are pavement grades.





JUN 14 1965

NORTH REST AREA PREBLE COUNTY PRE 70-247 RAMP "C"

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

26
62

PREBLE COUNTY
PRE-70-247

Shelter House

Note: For pavement joint legend, see sheet 25.

Road side Toilet & Storage Unit ff 1215.80'

Well Casing

4" Bldg. & Well Casing

6" C.I. Pipe

600 Gallon Trash Trap

Elev. 1213.5

Sewage Treatment Elev. 1214.0'

Elev. 1213.5

Chlorinator

Prop. Swale

6' Sidewalk 4"thick

7"Conc. Walk

6' Sidewalk

Taper curb from 9" to 6" in 15'

Type 8 Concrete Curb (Modified)

6"Parking Lines

Parking 32 Cars

No. 6 C.B. F/L 1203.41'

Type 8 Concrete Curb (Modified)

5' SIDEWALK

Parking 12 Trucks Prop. 15"

No. 6 C.B. F/L 1208.9'

Prop. 15"

6'HW-E Endwall F/L 1208.7'

6'x12' Sodding

Ramp "C"

Ramp "D"

Type 8 Concrete Curb (Modified)

Taper Curb from 9" to 6" in 15'

Δ = 64° T = 46.87' 75' R

P.C. + Sta. 57+86.06

Δ = 80°12'23" L = 69.99' 50' R. to E.P.

Note: All elevations on 25' stations unless otherwise indicated. All grades are edge of pavement grades unless otherwise noted.

* Type 8 Curb (Modified) shall have height transitioned from 9" to 2" in a distance of 15'

JUN 14 1965

PREBLE COUNTY PRE-70-247 NORTH REST AREA

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

27
62

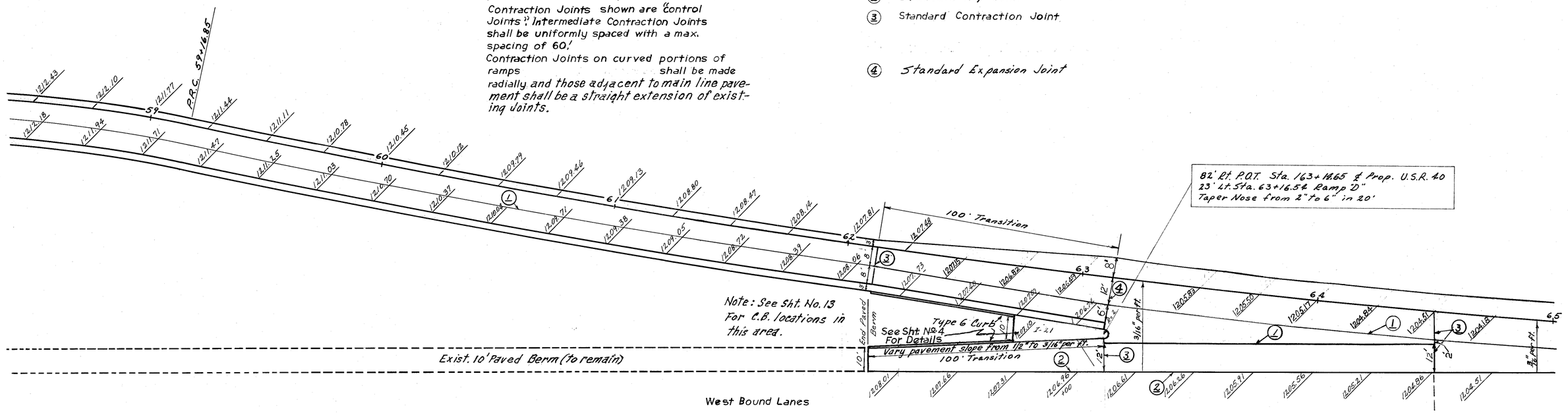
PREBLE COUNTY
PRE-70-2.47

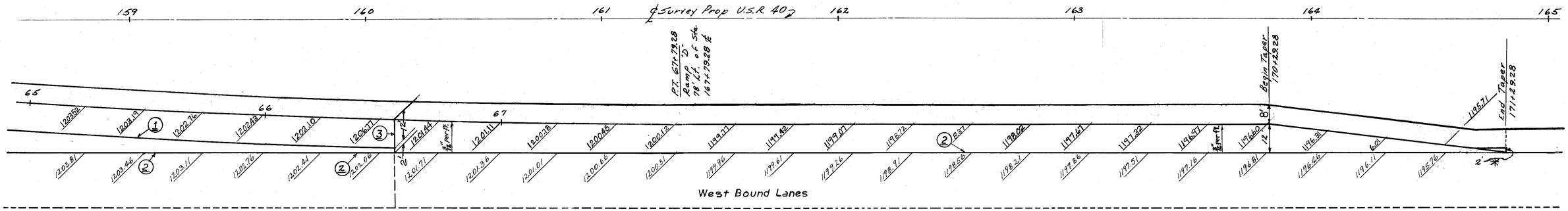
Note: Grades shown are pavement grades

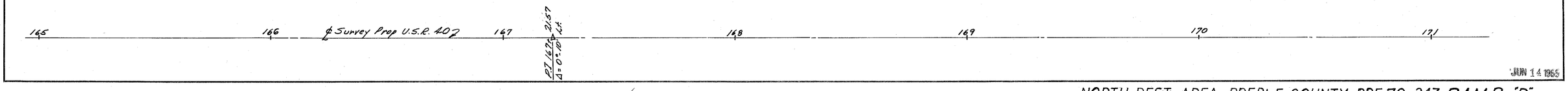
Elevation at 25' intervals on ramp pavement and main line pavement
Contraction Joints shown are "Control Joints". Intermediate Contraction Joints shall be uniformly spaced with a max. spacing of 60'.
Contraction Joints on curved portions of ramps shall be made radially and those adjacent to main line pavement shall be a straight extension of existing joints.

LEGEND

1. Standard Longitudinal Joint
2. Standard Key Joint
3. Standard Contraction Joint
4. Standard Expansion Joint

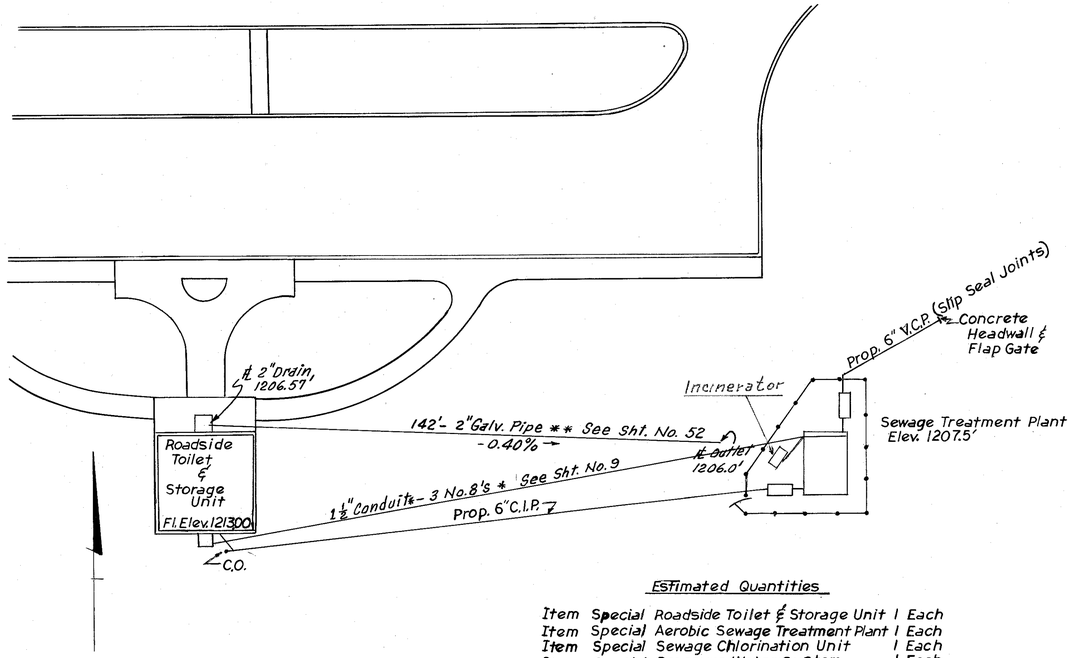






JUN 14 1965

NORTH REST AREA PREBLE COUNTY PRE-70-2.47 RAMP "D"



Scale 1" = 5' Vert.
1" = 20' Horiz.

≠ Note: Outlet fl. elevations for Clarifier & Chlorination tank & inlet elevation of chlorination tank are for the Aer-o-flow system and must be altered for Yeo-Wave or other systems.

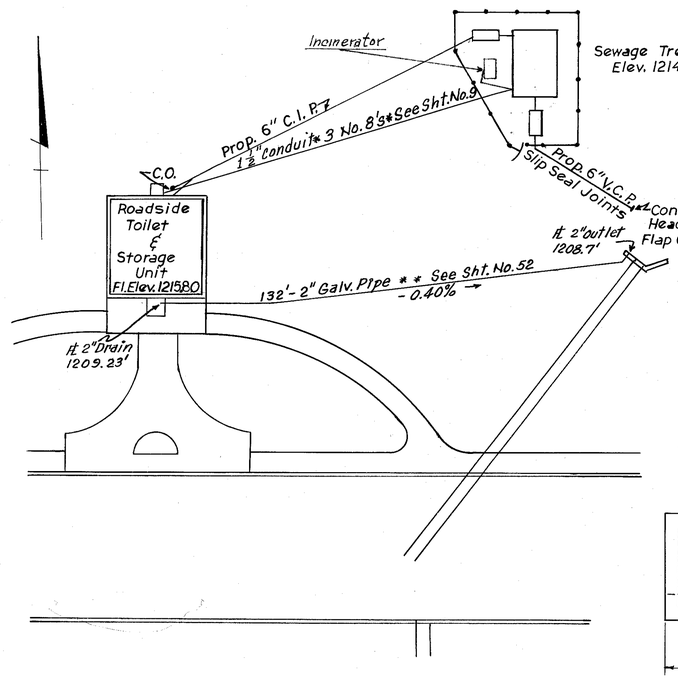
REST AREA TREATMENT PLANT ~ RT. SIDE

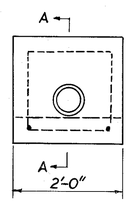
Scale 1" = 5' Vert.
1" = 20' Horiz.

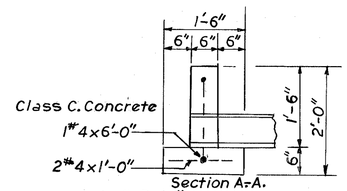
≠ Note: Outlet fl. elevations for Clarifier & Chlorination tank & inlet elevation of chlorination tank are for the Aer-o-flow system and must be altered for Yeo-Wave or other systems.

REST AREA TREATMENT PLANT ~ LT. SIDE

PREBLE COUNTY
PRE-70-2.47







Headwall Detail
1 - Req'd. (1 per Rest Area)
scale ¾" = 1'-0"

Estimated Quantities

Item	Special	Roadside Toilet & Storage Unit	1 Each
Item	Special	Aerobic Sewage Treatment Plant	1 Each
Item	Special	Sewage Chlorination Unit	1 Each
Item	Special	Pressure Water System	1 Each
Item	I-26	Chain Link Fence, 42" high	132 Lin. Ft.
Item	I-26	Chain Link Fence Gate, 42" high	1 Each
* Item	I-1	6" C.I.P.	106 Lin. Ft.
* Item	I-1	6" V.C.P. (Slip Seal Joints)	36 Lin. Ft.
* Item	I-2	Masonry	0.1 Cu. Yds.
* Item	I-5	6" Flap Gate	1 Each

* Payment for these quantities included in the Aerobic Sewage Treatment Plant.

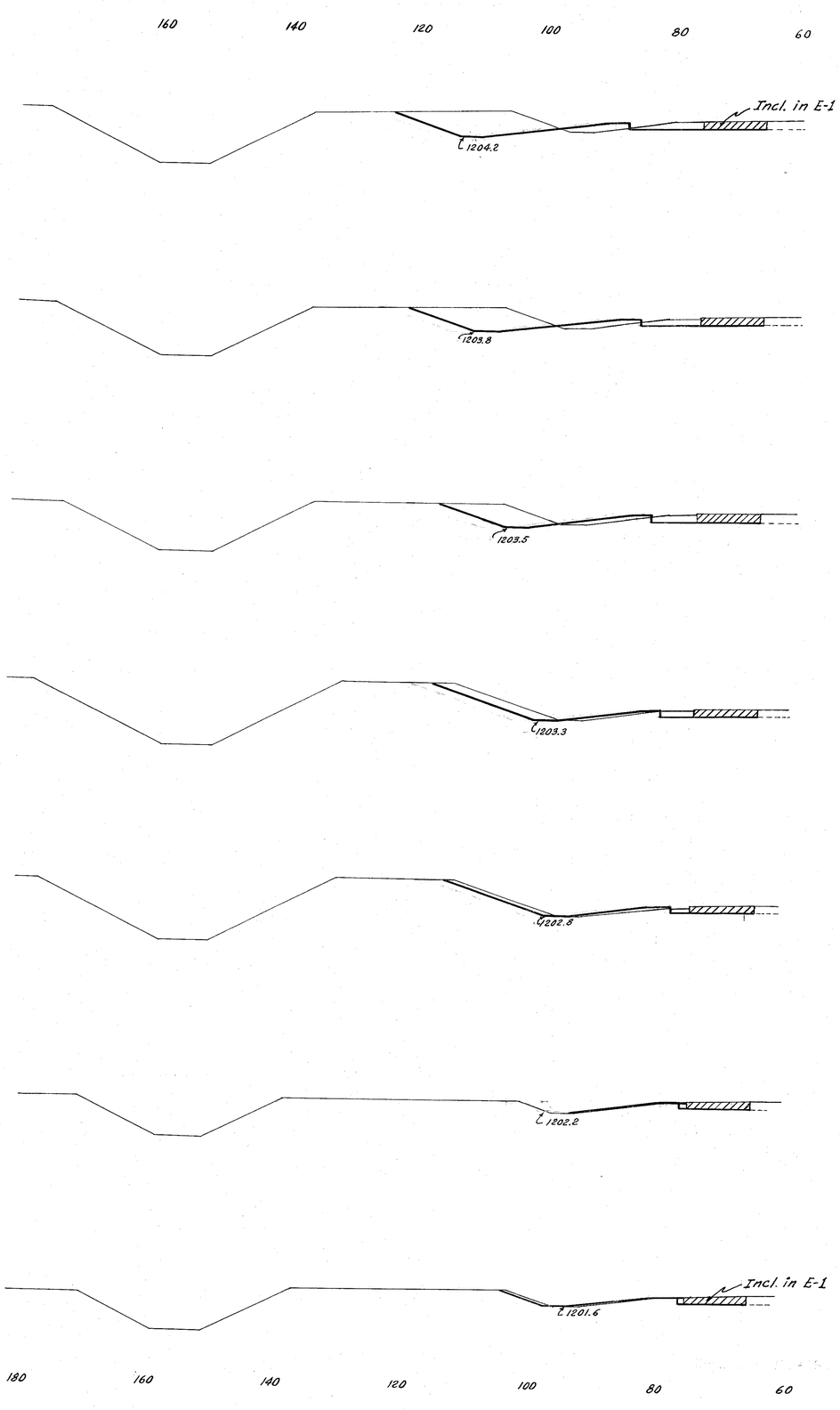
** Payment for quantities to be included in Item Special Roadside Toilet & Storage Unit

Estimated Quantities

Item	Special	Roadside Toilet & Storage Unit	1 Each
Item	Special	Aerobic Sewage Treatment Plant	1 Each
Item	Special	Sewage Chlorination Unit	1 Each
Item	Special	Pressure Water System	1 Each
Item	I-26	Chain Link Fence, 42" high	132 Lin. Ft.
Item	I-26	Chain Link Fence, Gate 42" high	1 Each
* Item	I-1	6" C.I.P.	162 Lin. Ft.
* Item	I-1	6" V.C.P. (Slip Seal Joints)	36 Lin. Ft.
* Item	I-2	Masonry	0.1 Cu. Yds.
* Item	I-5	6" Flap Gate	1 Each

** Payment for quantities to be included in Item Special Roadside Toilet & Storage Unit

* Payment for quantities to be included in the Aerobic Sewage Treatment Plant.



137+00
1207.24 Edge Exist. Pvmt.

136+00
1206.64

135+00
1206.04

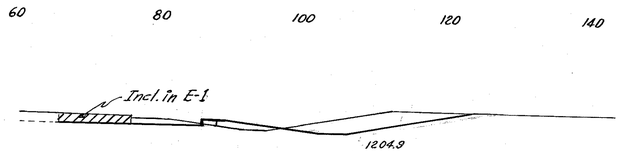
134+00
1205.44

133+00
1204.84

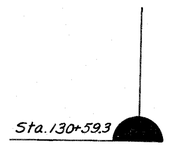
132+00
1204.24

131+00
1203.64 Edge Exist. Pvmt.

130+59.30 Begin Work Lt.



136+00 Rt. 11 s.f. cut



PREBLE COUNTY
PRE-70-247

139 22

402 63

78 12

248 41

56 10

228 26

39 4

115 20

23 7

69 30

14 9

57 20

17 2

21 2

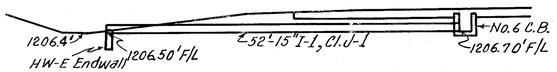
11 0

180 160 140 120 100 80 60

60 80 100 120 140

30
62

PREBLE COUNTY
PRE-70-2.47



142+57.5 C.B. Lt

142+00
1210.24 Edge Exist. Pvmt.

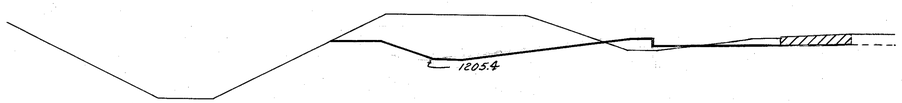
To Sht. No. 34 Lt.	195	10
To Sht. No. 33 Rt.	101	12
Total	296	22

930 104

141+00
1209.64

206 34

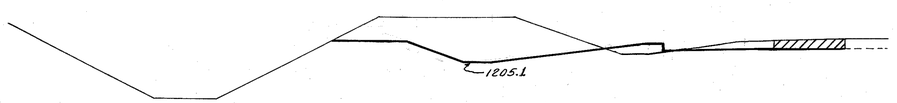
800 109



140+00
1209.04

226 25

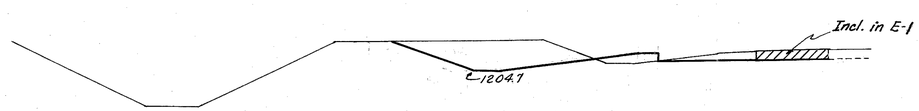
907 80



139+00
1208.44

264 18

780 91



157 31

138+00
1207.84 Edge Exist. Pvmt.

548 98

Sta. 137+00 139 22

160 140 120 100 80 60

60 80 100 120 140

EXTENSIONS L & R. ~ STA. 138+00 TO STA. 142+00

JUN 14 1965

PREBLE COUNTY
PRE-70 -2.47

60 80 100 120 140 160 180 200 220 240 260 280 300

147+00
1213.24 Edge Exist. Pvmt.
1210.0
1210.2

146+50
1212.94
1210.2
1210.1

146+00
1212.64
1210.5
1209.9

145+50
1212.34
1210.7
1209.7

Note ~ Existing Paved Shoulder to remain
Sta 145+04 to Sta 163+62.7 on Rt.

145+00
1212.04
1209.5

144+50
1211.74
4" per ft.
1209.0

144+00
1211.44
1208.7

143+50
1211.14
1208.5

143+00
1210.84 Edge Exist. Pvmt.
Incl. in E-1
1208.2

60 80 100 120 140 160 180 200 220 240 260 280 300

133	10
345	17
240	8
341	20
135	14
255	35
140	24
262	68
143	49
311	64
193	20
374	19
211	1
411	2
233	1
487	4
293	3
730	28
Sta. 142+00	
101	12

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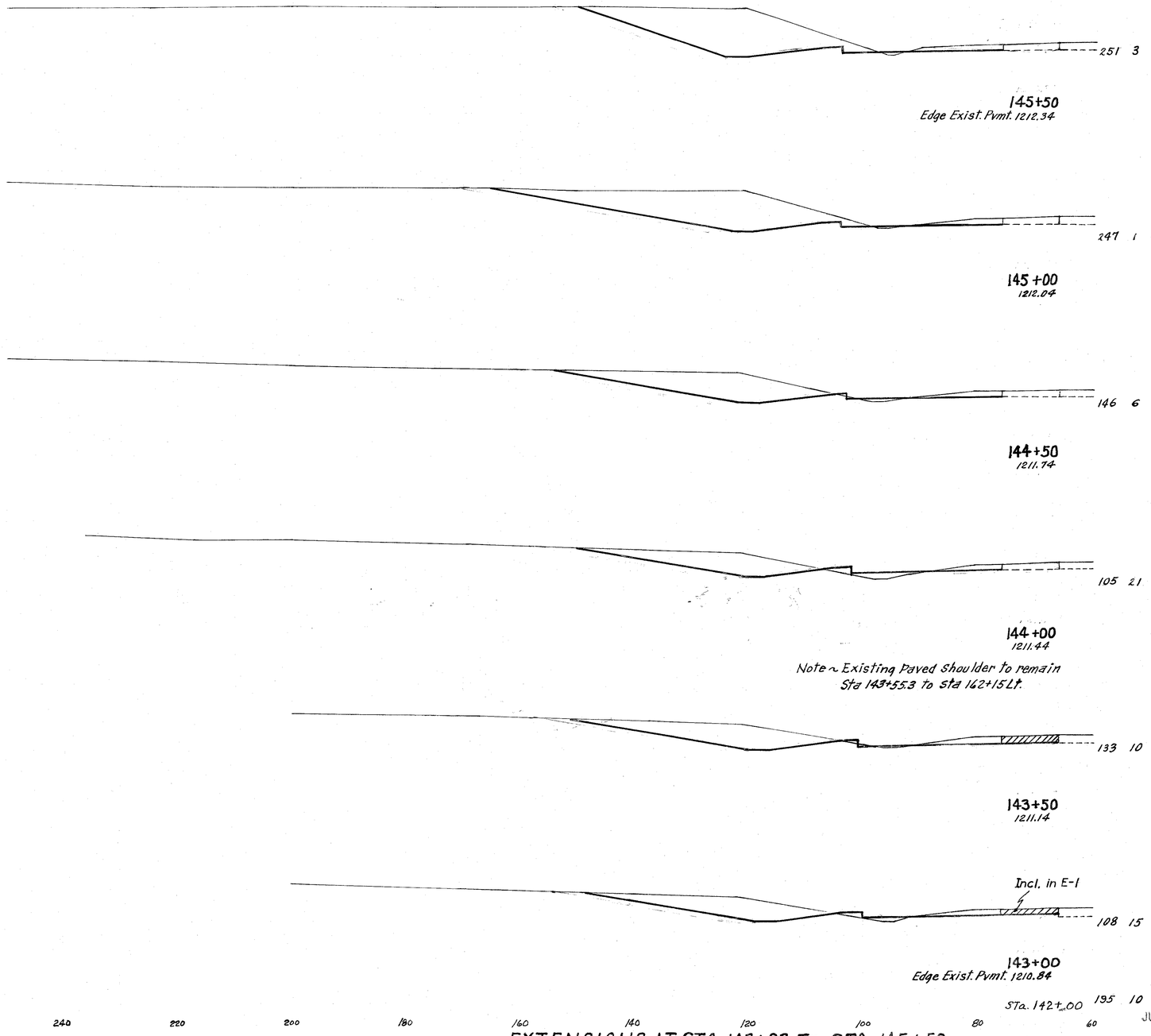
EXTENSIONS RT. ~ STA 143+00 TO STA 147+00

360 340 320 300 280 260 240 220 200 180 160 140 120 100 80 60

32
62

PREBLE COUNTY
PRE-70-2.47



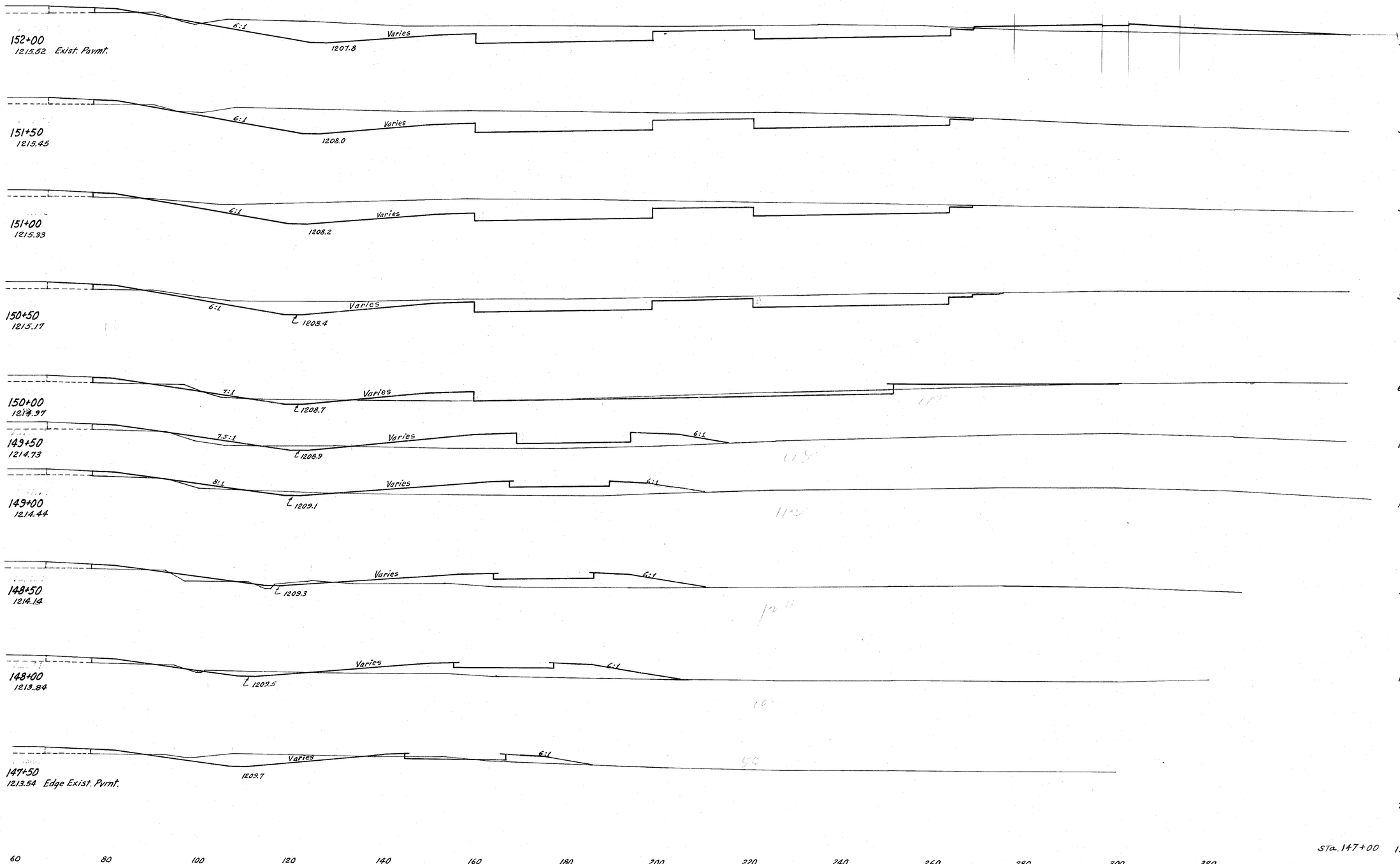
360 340 320 300 280 260 240 220 200 180 160 140 120 100 80 60

EXTENSIONS LT. STA. 143+00 TO STA. 145+50

JUN 14 1965

PREBLE COUNTY
PRE-70-2.47

60 80 100 120 140 160 180 200 220 240 260 280 300 320



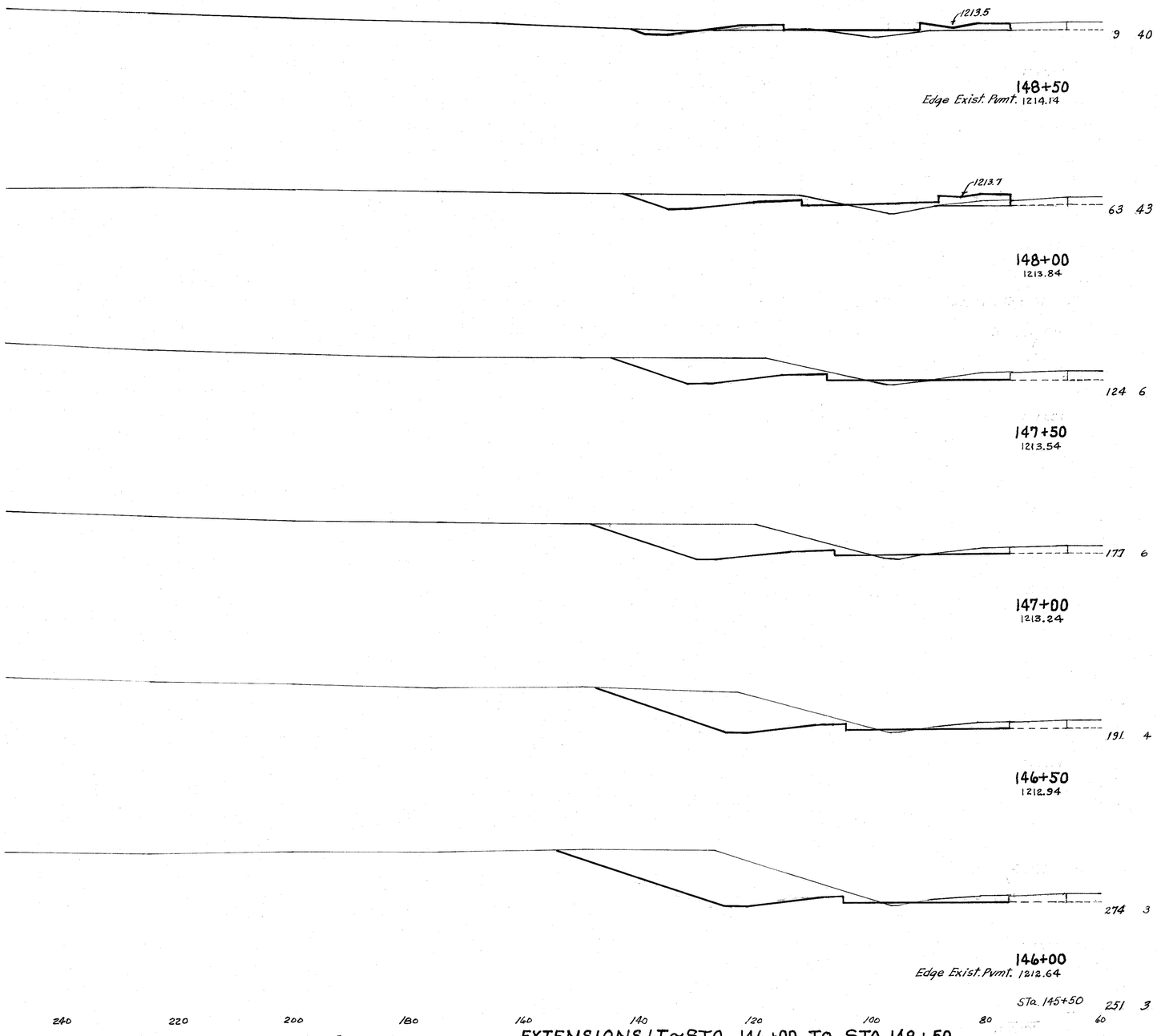
	437	9
918		15
	554	7
1003		16
	529	10
801		19
	336	10
371		87
	65	84
70		233
	11	168
23		307
	14	164
23		304
	11	164
25		301
	16	161
88		182
	79	36
196		43
Sta. 147+00	133	10

JUN 14 1965

EXTENSIONS RT. ~ STA 147+50 TO STA 152+00

PREBLE COUNTY
PRE-70-2.47

340 320 300 280 260 240 220 200 180 160 140 120 100 80 60



Sta. 131+593 to 176+587
Excavation 61,538 Cu. Yds.
Embankment 25,800 Cu. Yds.
Embankment +15% 29,670 Cu. Yds.

EXTENSIONS LT. ~ STA. 146+00 TO STA. 148+50.

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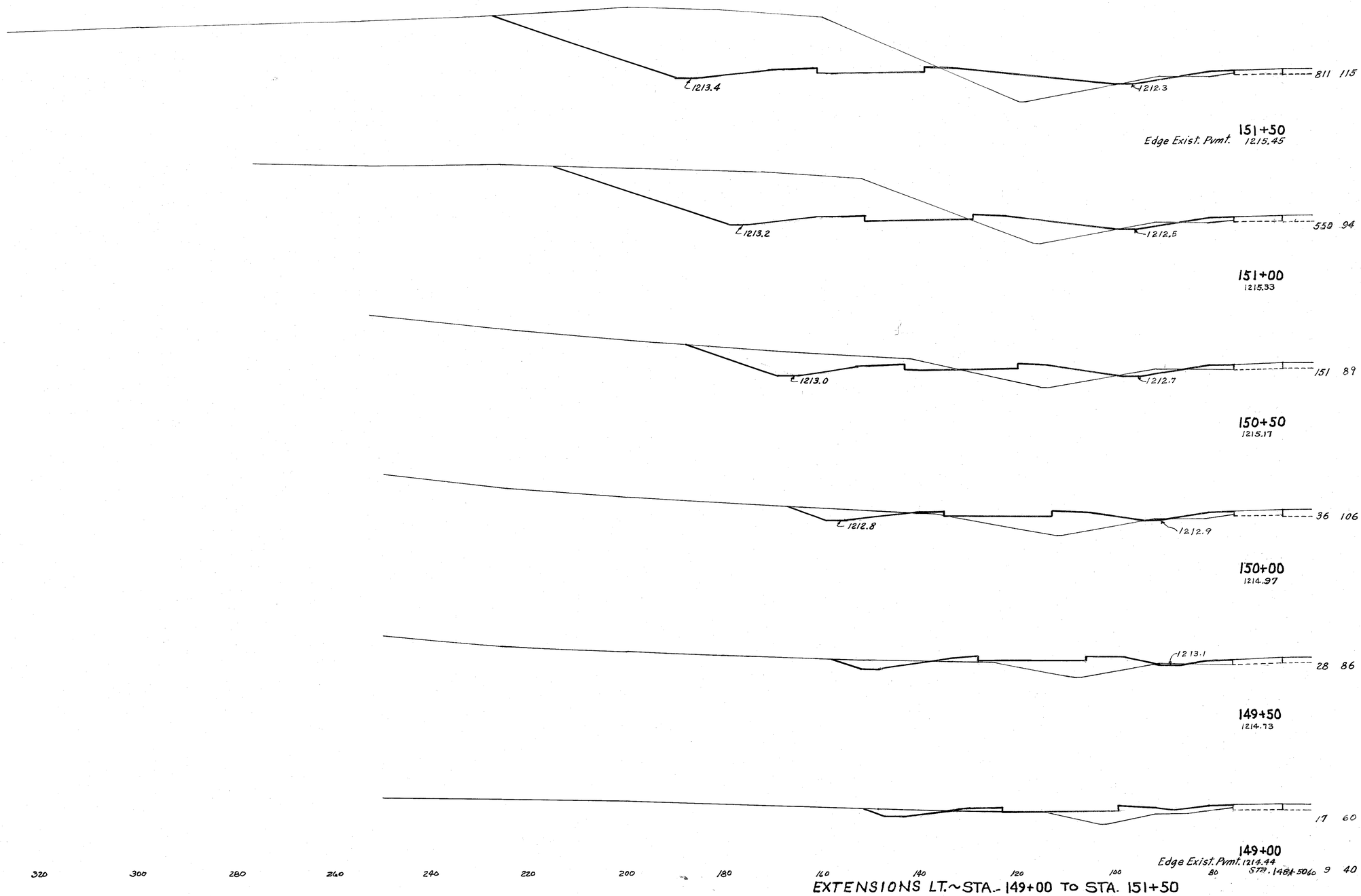
PREBLE COUNTY
PRE-70-2.47

360 340 320 300 280 260 240 220 200 180 160 140 120 100 80 60

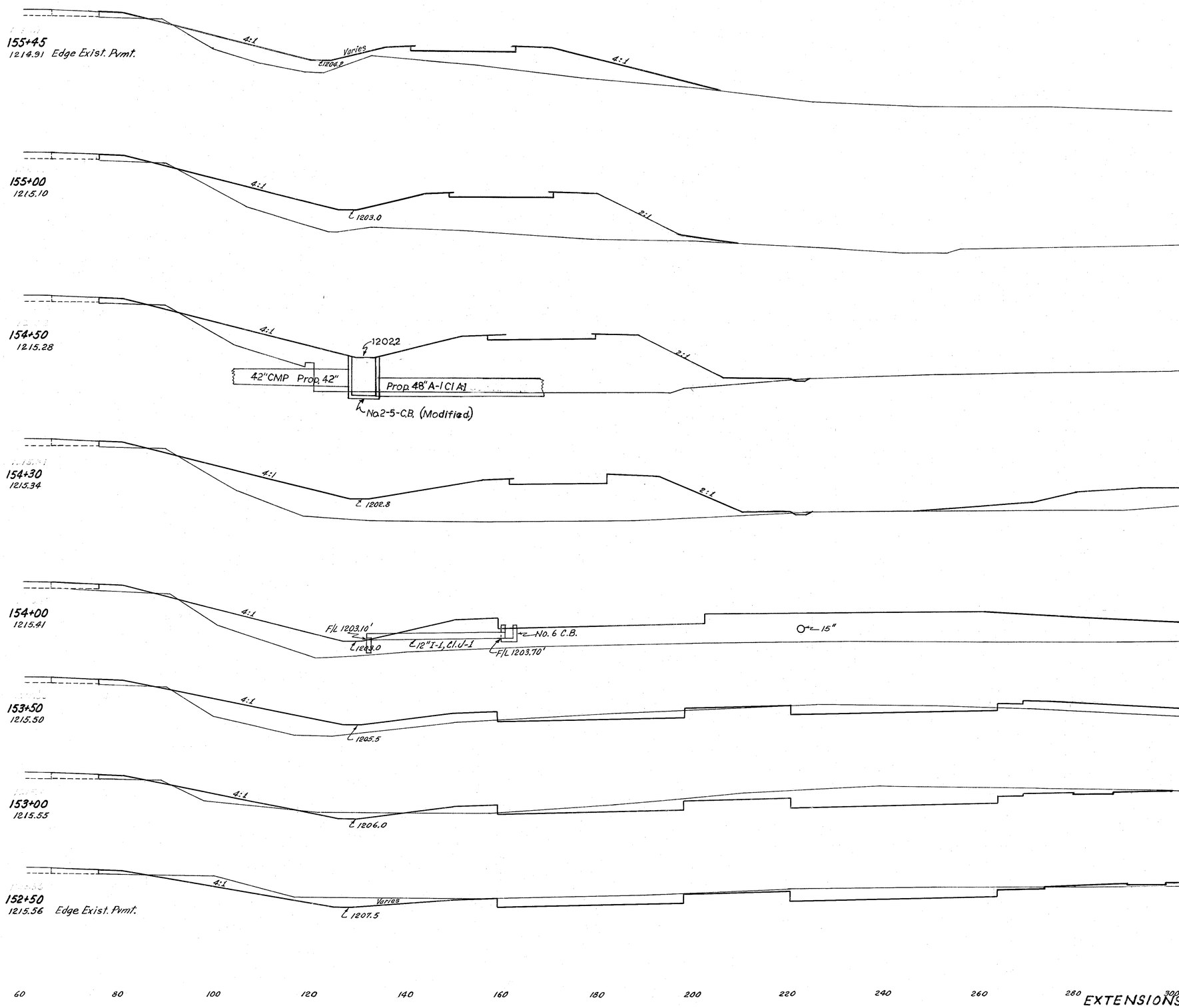


EXTENSIONS LT.~STA. 149+00 TO STA. 151+50

JUN 14 1965

PREBLE COUNTY
PRE-70-247

60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360



3	328	
5	797	
3	628	
7	1447	
5	935	
4	622	
5	745	
11	1124	
15	1278	
117	1522	
111	366	
378	391	
297	56	
543	59	
289	8	
672	16	
Sta. 152+00	437	9

EXTENSIONS RT. ~ STA 152+50 TO STA 155+45

JUN 14 1965

PREBLE COUNTY
PRE-70-2.47

360 340 320 300 280 260 240 220 200 180 160 140 120 100 80 60

1209.8

3 427

154+00
Edge Exist. Pvmt. 1215.41

100 581

1210.5

105 201

153+50
1215.50

252 279

℄ 1214.0

1210.8

167 100

153+00
1215.55

557 209

℄ 1213.8

1211.5

435 126

152+50
1215.56

1032 215

℄ 1213.6

1211.9

680 106

152+00
Edge Exist. Pvmt. 1215.52

1381 205

Sta. 151+50 811 115

360 340 320 300 280 260 240 220 200 180 160 140 120 100 80 60

EXTENSIONS LT. ~ STA. 152+00 TO STA. 154+00

PREBLE COUNTY
PRE-70-247

360 340 320 300 280 260 240 220 200 180 160 140 120 100 80 60

1208.0

156+50 Ext. Lt.

400 370

1209.2

156+50
Edge Exist. Pvmt. 1214.33

2 983

3 2223

1208.9

1 1418

156+00
1214.63

156+00 Ext. Lt.

400 370

70 2613

1213.6

155+45 Ext. Lt.

370

1208.6

68 1148

F/L 1209.10' 15" I-1, Cl. J-1 Sta 55+57 ℄ F/L 1208.90' 15" I-1, Cl. J-1 F/L 1208.70

1208.4

155+45
1214.89

92 1799

1213.8'

1208.3

42" Cl-A-1 42" Cl A-1

No. 2-5 C.B. (Modified)

42 1011

155+00
1215.10

55 1541

1209.0

17 653

154+50
1215.28

7 462

1209.5

3 595

154+30
Edge Exist. Pvmt. 1215.34

3 568

Sta. 154+00 3 427

360 340 320 300 280 260 240 220 200 180 160 140 120 100 80 60

EXTENSIONS LT. ~ Sta. 154+30 to 156+50 66' Lt. of ℄

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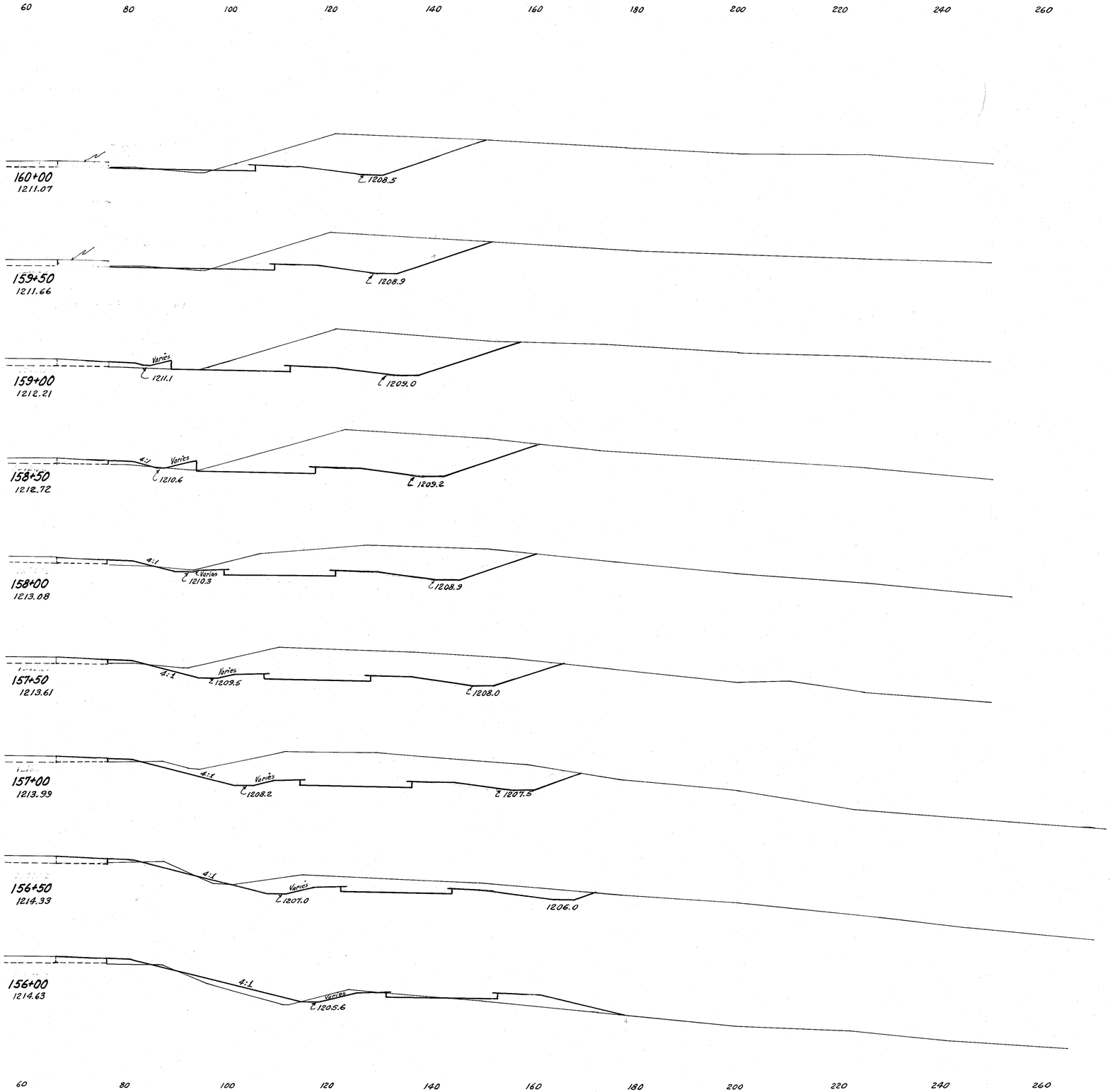
PREBLE COUNTY
PRE-70-247



240	5	
455	7	
251	3	
521	15	
312	13	
622	27	
360	16	
611	22	
300	8	
606	12	
355	5	
687	10	
387	6	
506	12	
160	7	
165	94	
18	94	
21	430	
Sta. 155+45	3	328

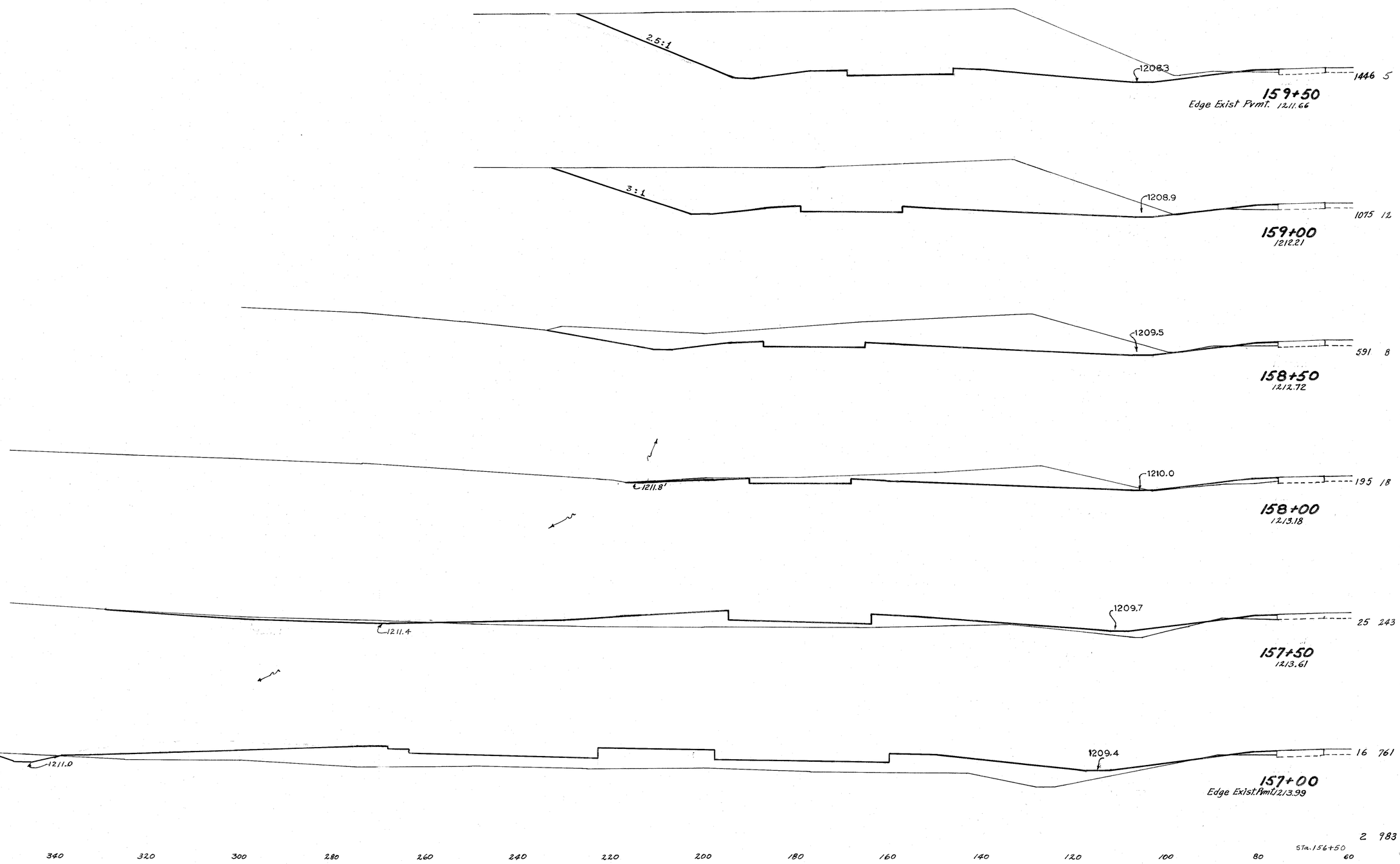
JUN 14 1965

EXTENSIONS RT.~STA. 156+00 TO STA. 160+00

360 340 320 300 280 260 240 220 200 180 160 140 120 100 80 60

40
62

PREBLE COUNTY
PRE-70-247



360 340 320 300 280 260 240 220 200 180 160 140 120 100 80 60

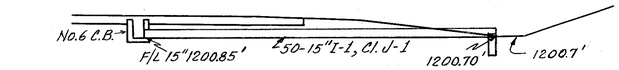
Sta. 156+50

JUN 14 1965

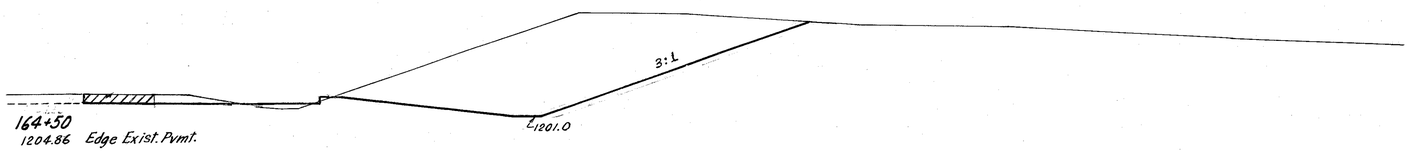
EXTENSIONS LT. Sta. 157+00 to 159+50

PREBLE COUNTY
PRE-70-2.47

60 80 100 120 140 160 180 200 220 240 260



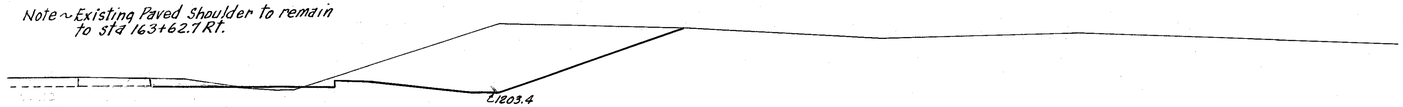
164+57 C.B. Rt.



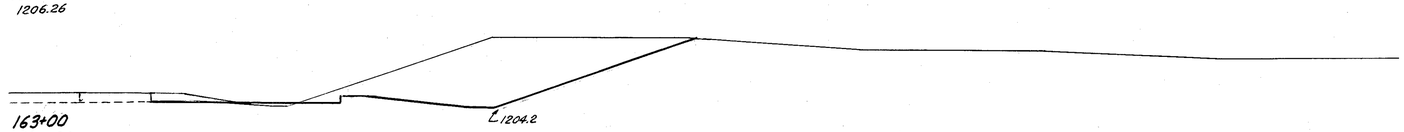
164+50
1204.86 Edge Exist. Pvmt.

164+00
1205.56

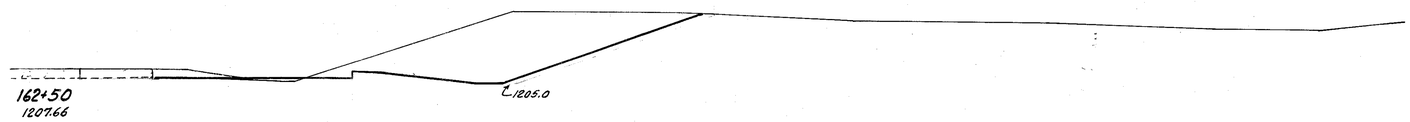
Note ~ Existing Paved Shoulder to remain to sta 163+62.7 Rt.



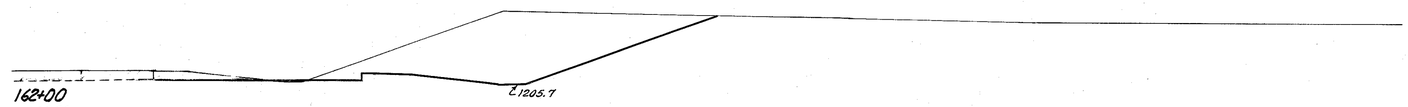
163+50
1206.26



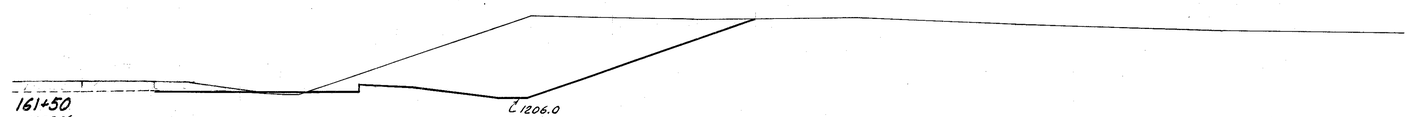
163+00
1206.96



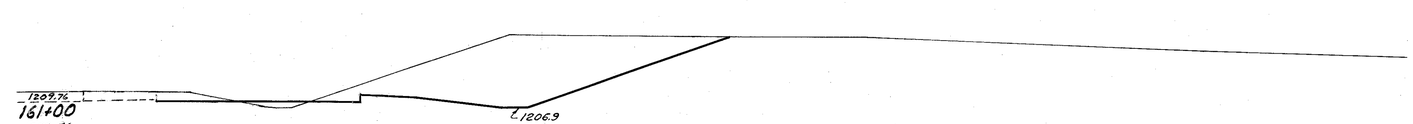
162+50
1207.66



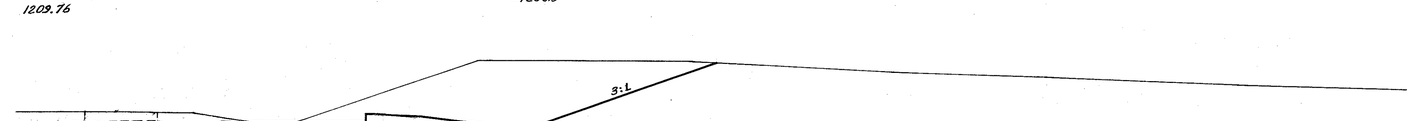
162+00
1208.36



161+50
1209.06



161+00
1209.76



160+50
1210.44 Edge Exist. Pvmt.

60 80 100 120 140 160 180 200 220 240 260

492	8	
694	8	
257	1	
468	6	
248	5	
481	9	
272	5	
518	7	
287	3	
548	4	
305	1	
597	4	
340	3	
590	13	
297	11	
553	11	
300	1	
500	6	
Sta. 160+00	240	5

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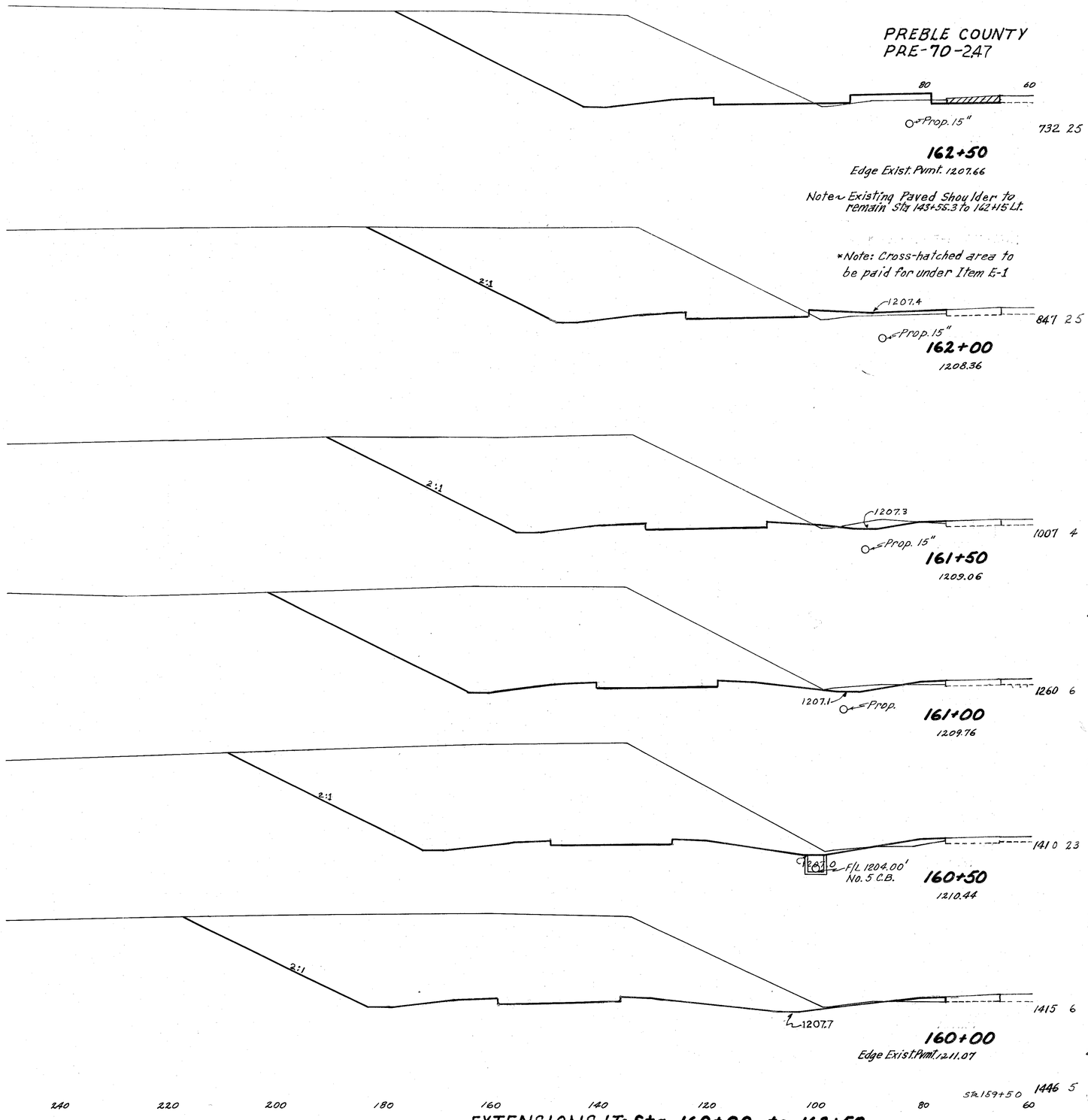
EXTENSIONS RT. ~ STA 160+50 TO STA 164+50

280 260 240 220 200 180 160 140 120 100

PREBLE COUNTY
PRE-70-247



280 260 240 220 200 180 160 140 120 100 80 60

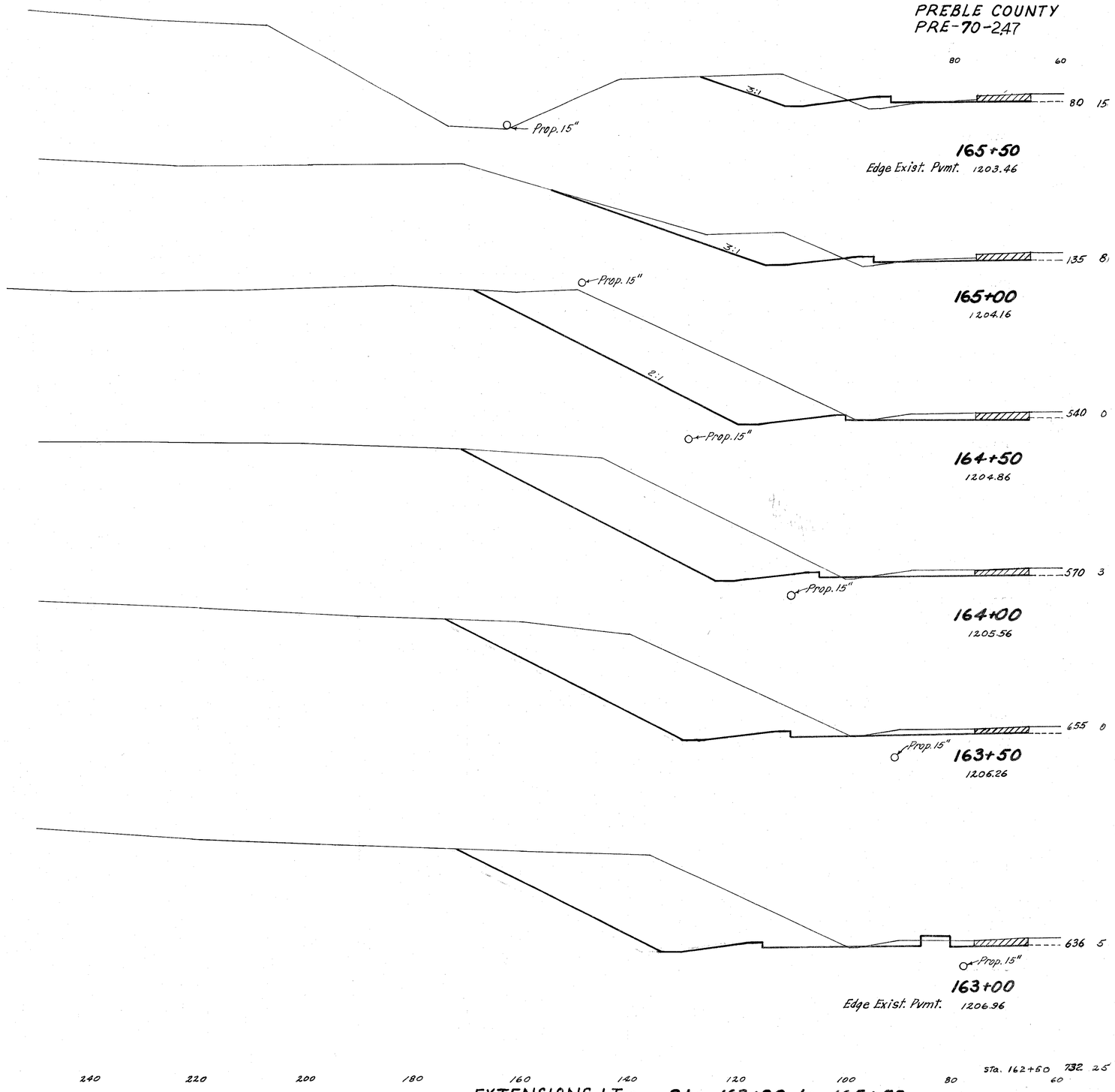
EXTENSIONS LT.~Sta. 160+00 to 162+50

260 240 220 200 180 160 140 120 100

43
62

PREBLE COUNTY
PRE-70-2.47

80 60



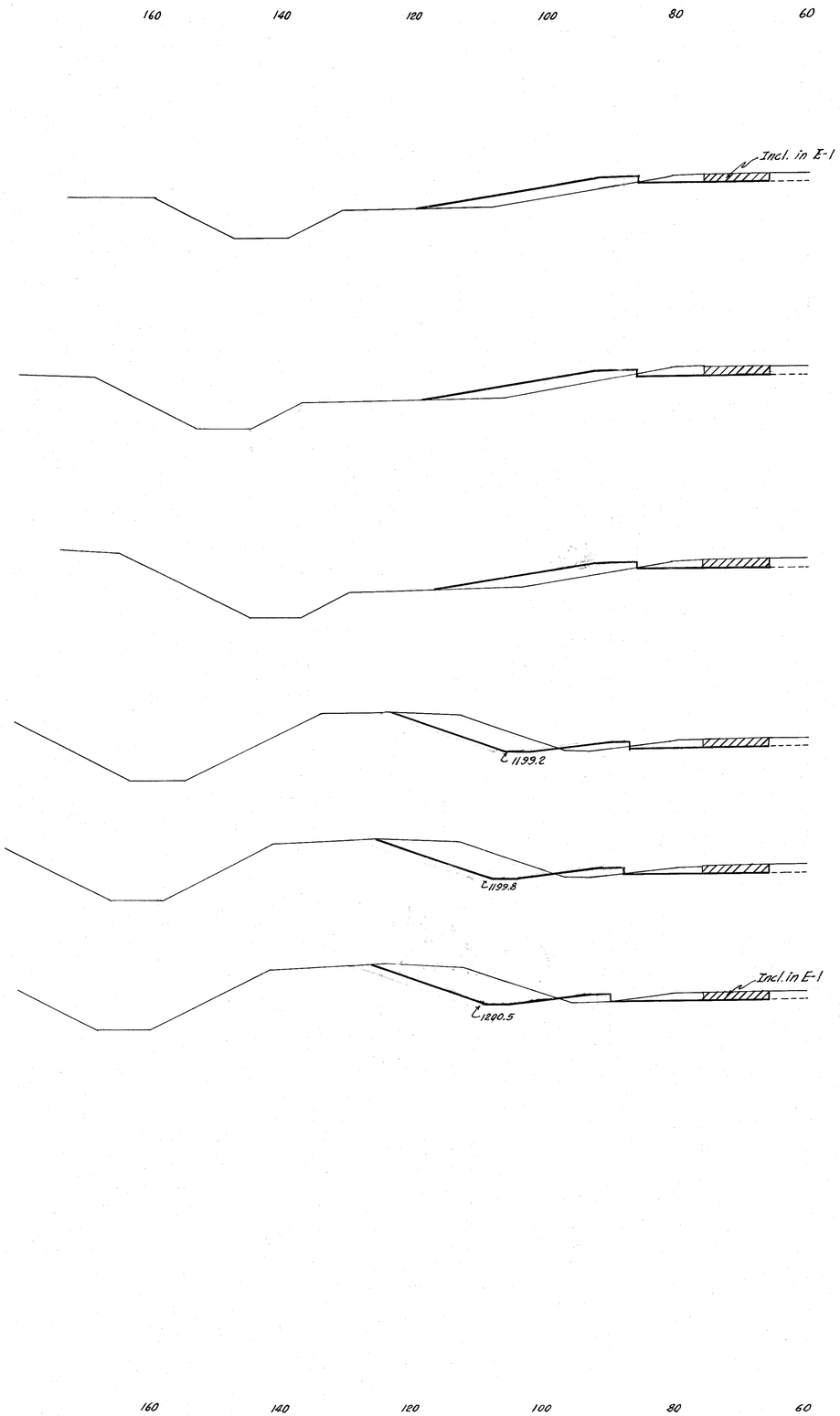
260 240 220 200 180 160 140 120 100 80 60

Sta. 162+50 732 25

JUN 14 1965

EXTENSIONS LT. ~ Sta. 163+00 to 165+50

PREBLE COUNTY
PRE-70-2.47



170+00
1197.16 Edge Exist. Pvmt.

169+50
1197.86

169+00
1198.56

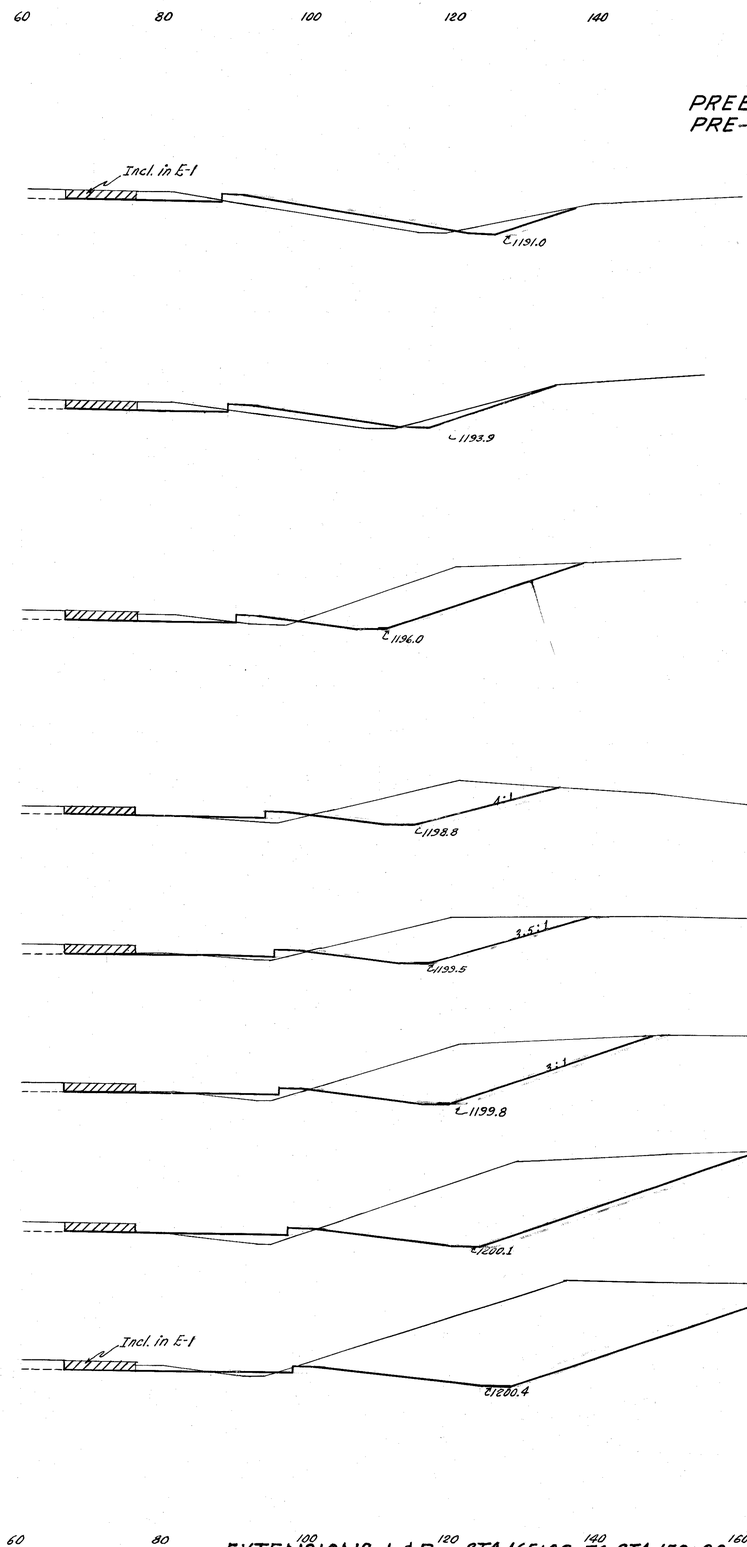
167+00
1201.36

166+40
1202.20

166+00
1202.76

165+50
1203.46

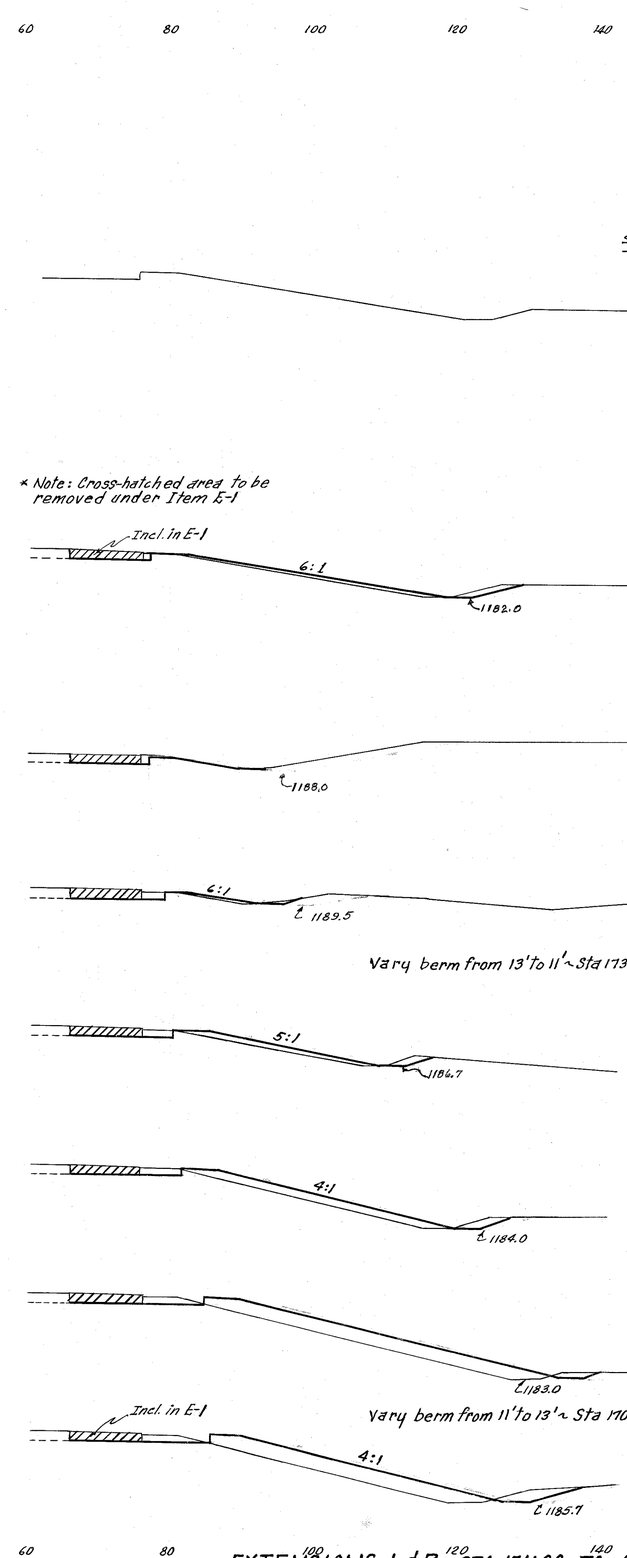
165+00
1204.16 Edge Exist. Pvmt.



45	87
94	130
56	54
201	104
161	58
193	26
473	53
233	22
409	24
319	20
717	42
Ahead	455 25
Back	375 10
825	12
520	3
937	10
Sta. 164+50	497 8
1296	319

EXTENSIONS L. & R. STA. 165+00 TO STA. 170+00

PREBLE COUNTY
PRE-70-2.47



Sta. 176+58.7

176+70
1187.78 Edge Exist. Pvmt.

176+58.70 End Work Rt.

* Note: Cross-hatched area to be removed under Item E-1

Incl. in E-1
6:1
1182.0

176+07
1188.66

175+00
1190.16

Incl. in E-1
1188.0

174+00
1191.56

6:1
1189.5

Vary berm from 13' to 11' ~ Sta 173+00 to Sta 174+00 Rt.

173+50
1192.26

5:1
1184.7

173+00
1192.96

4:1
1184.0

171+50
1195.06

1183.0

171+26.15 End Work Lt.

Sta. 171+26.15

Vary berm from 11' to 13' ~ Sta 170+00 to Sta 171+50

Incl. in E-1
4:1

171+00
1195.76 Edge Exist. Pvmt.

1185.7

Sta. 170+00

EXTENSIONS L. & R. STA. 171+00 TO STA. 176+00

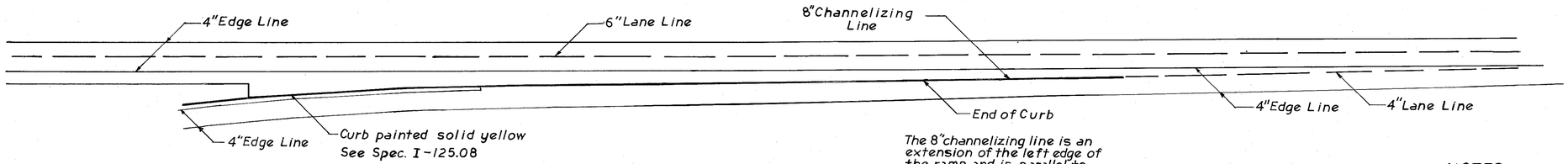
11	0
22	0
12	0
48	0
12	0
48	4
14	2
31	19
19	19
43	64
27	50
144	422
25	102
26	90
33	102
45	87
47	78
170	306
45	87

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

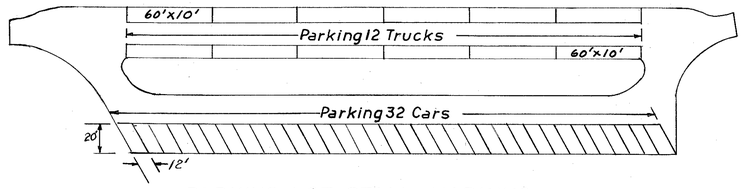
46
62

PREBLE COUNTY
PRE-70-247

ENTRANCE TERMINAL—TAPERED ACCELERATION LANE

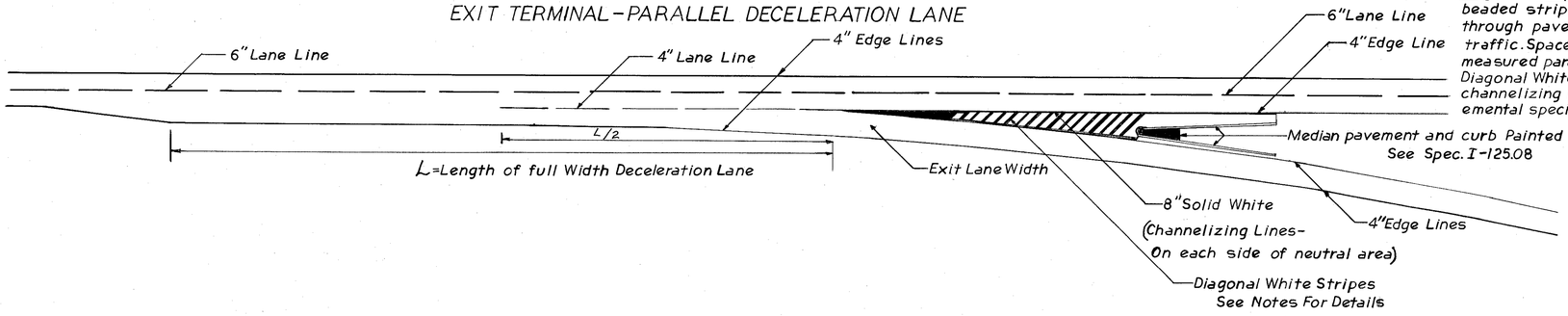


The 8"channelizing line is an extension of the left edge of the ramp and is parallel to the right edge. The solid line must be carried to within 6' of the through lane. The 4" lane line is to continue to the edge of the through lane.



PARKING LOT STALL MARKING

EXIT TERMINAL-PARALLEL DECELERATION LANE



NOTES

Edge Lines must be placed in the locations as shown to conform to supplemental specification No. I-125 and defined in Section I-125.06.

Lane Lines shall be placed in the locations as shown to conform to supplemental specification No. I-125 and defined in Section I-125.06.

Channelizing Lines shall be continuous white beaded stripes 8" in width placed in the locations as shown to conform to supplemental specification No. I-125 and defined in Sec. I-125.07b.

Paint and Beads on Channelizing Lines shall be applied at the following rates: For an 8" Line use 32 Gallons of Paint per mile of stripe with 6 pounds of beads per gallon of paint.

Paint on the diagonal stripes shall be applied at the rate of 96 gallons of paint per mile of stripe and glass beads shall be applied at the rate of 6 pounds per gallon of paint.

Diagonal Stripes in Exit Ramp Markings shall be 2' wide, White beaded stripes set at a 45° angle to the center line of the through pavement an slanted in the direction of the flow of traffic. Space between the 2' diagonal stripes shall be 6' as measured parallel to the centerline of the through pavement. Diagonal White stripes shall be placed between the two 8" channelizing lines of exit ramps as shown to conform to supplemental specification I-125 and defined in Sec. I-125.07c.

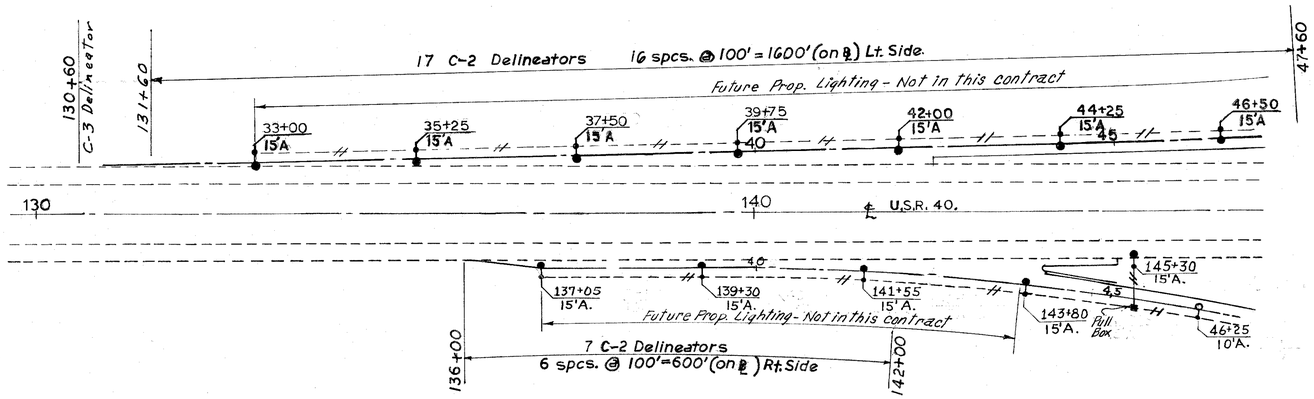
JUN 14 1965

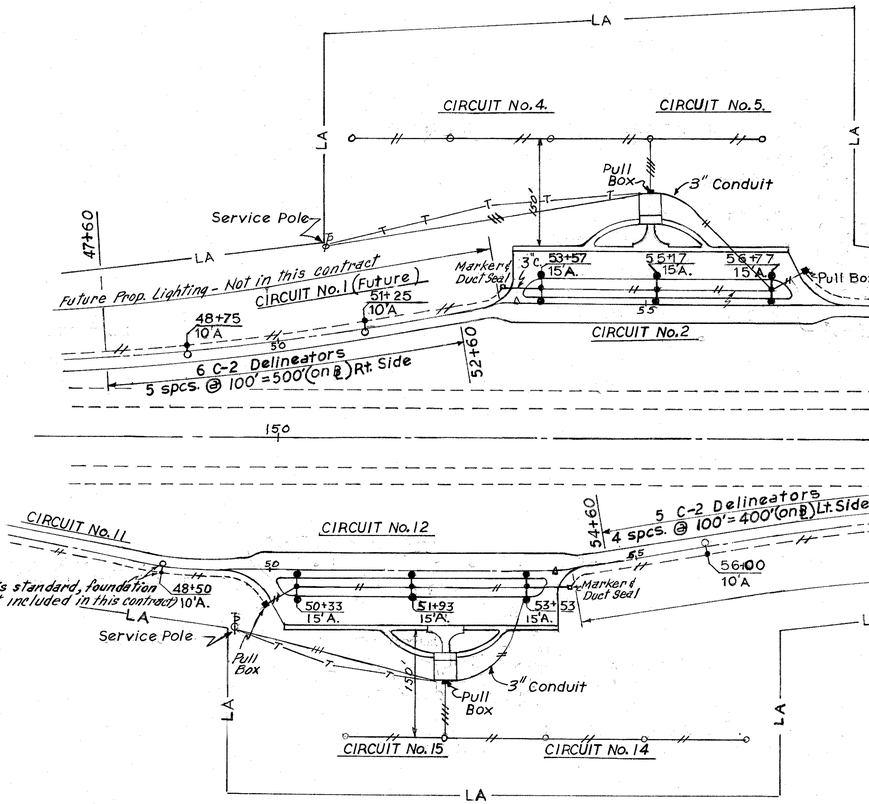
PREBLE COUNTY PRE-70-247 TRAFFIC (ZONE) PAINT MARKING
TRAFFIC STRIPING DETAILS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

47/62

PREBLE COUNTY
PRE-70-247



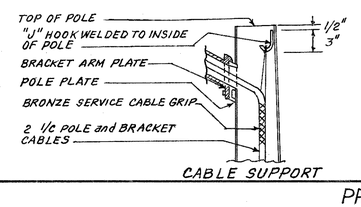


LIGHTING SUMMARY, RAMPS - ISLAND - PICNIC AREAS

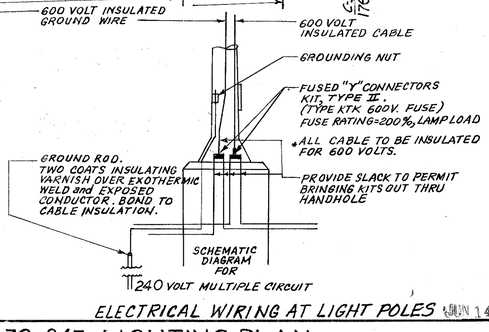
ITEM	QUANTITY	UNIT	DESCRIPTION
S-25	2550	LIN.FT.	NO.4/0 AWG CIRCUIT CABLE
S-25	2	EACH	LIGHT STANDARDS-RAMPS - 10' ARMS
S-25	4	EACH	LIGHT STANDARDS-SPEED CHANGE LANES 15' ARMS
S-25	6	EACH	LIGHT STANDARDS-ISLAND - TWIN-15' ARMS
S-25	10	EACH	LIGHT STANDARDS-PICNIC AREA
S-25	18	EACH	LUMINAIRES-RAMPS, ISLANDS AND SPEED CHANGE LANES
S-25	10	EACH	LUMINAIRES-PICNIC AREA
S-25	6	EACH	CONCRETE POLE FOUNDATION-RAMPS AND SPEED CHANGE LANES
S-25	6	EACH	CONCRETE POLE FOUNDATION - ISLANDS
S-25	6	EACH	CONCRETE PULL BOXES
S-25	10	EACH	CONCRETE POLE FOUNDATIONS - PICNIC AREA
S-25	1320	LIN. FT.	2 NO.4 CABLE DUCT
S-25	6725	LIN.FT.	NO.4 AWG CIRCUIT CABLE
S-25	2000	LIN.FT.	NO.12 AWG POLE AND BRACKET CABLE
S-25	1328	LIN. FT.	3" CONDUIT-LIGHTING
S-25	2070	LIN.FT.	2" CONDUIT-LIGHTING
S-25	890	LIN.FT.	1½" CONDUIT-TELEPHONE
S-25	1280	LIN.FT.	TRENCHING AND BACKFILL FOR CABLE DUCT
S-25	2	EACH	SERVICE POLE

LEGEND

- Speed Change Lane Standand
- Ramp Standard
- Island Standard
- Picnic Area Standard
- Underground Cable in Polyethylene Duct.
- No. of Single Conductors
- Underground Conduit ~ 2" unless indicated otherwise
- Cable Marker
- Pull Box
- 15'-0" Arm 10' Arm
- T Telephone Wire ~ 1½" Conduit



CABLE SUPPORT



ELECTRICAL WIRING AT LIGHT POLES

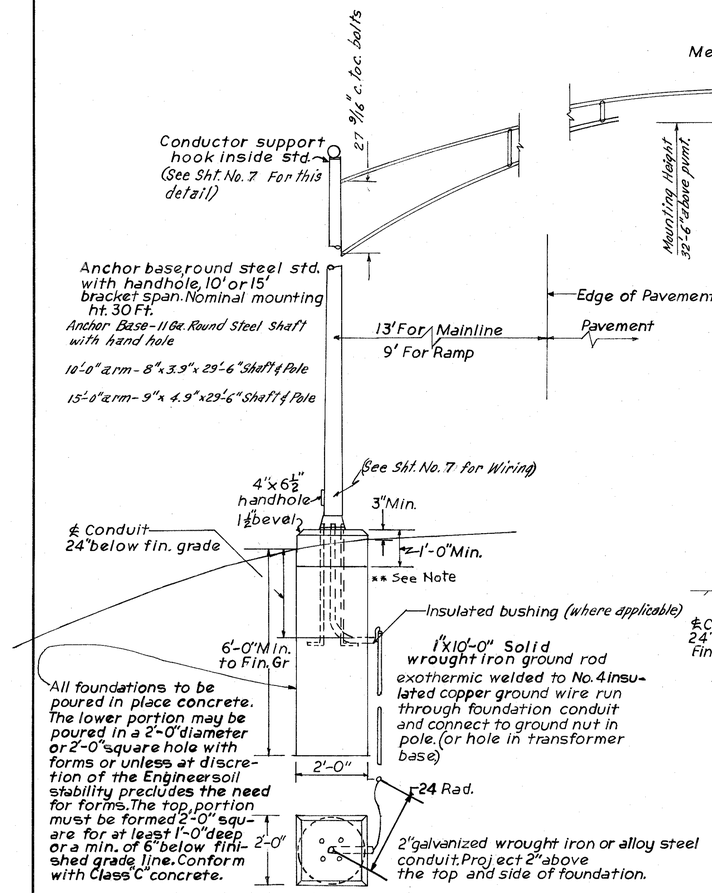
JUN 14 1971

PREBLE COUNTY PRE-70-247 LIGHTING PLAN

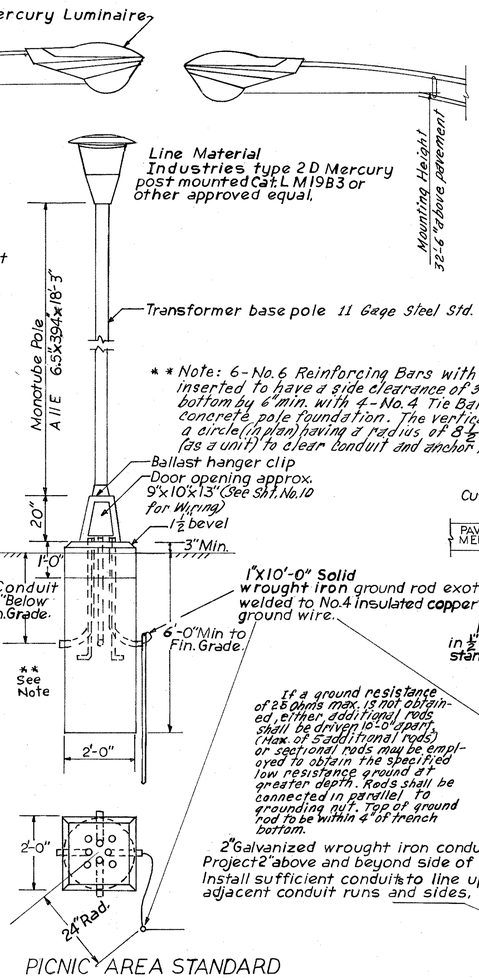
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

48/62

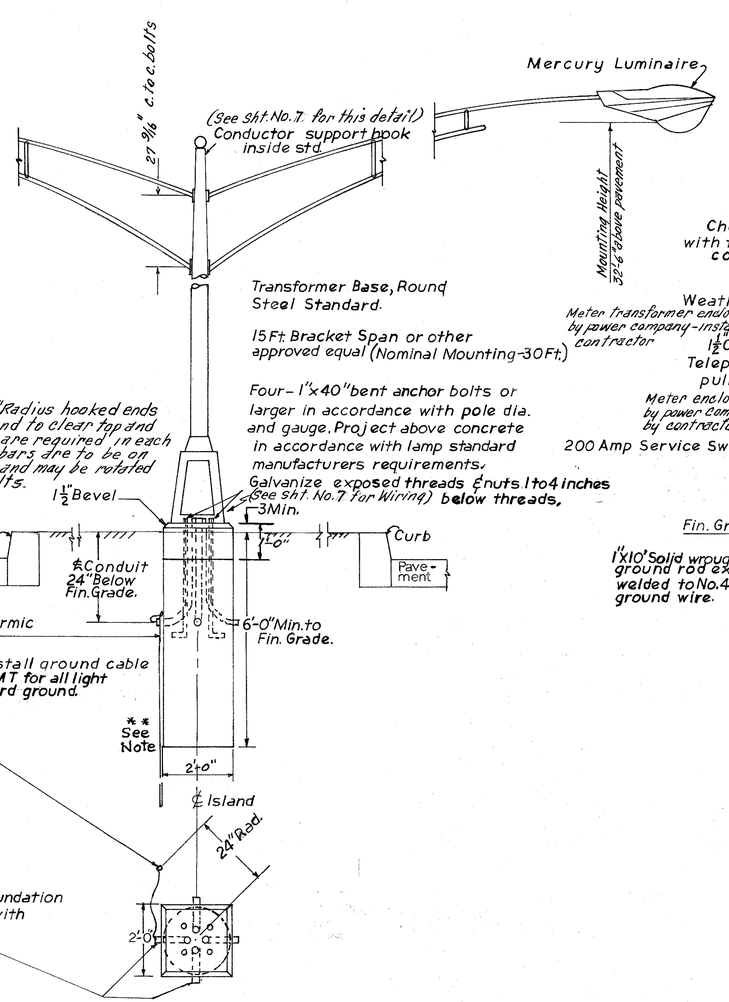
PREBLE COUNTY
PRE-70-2.47



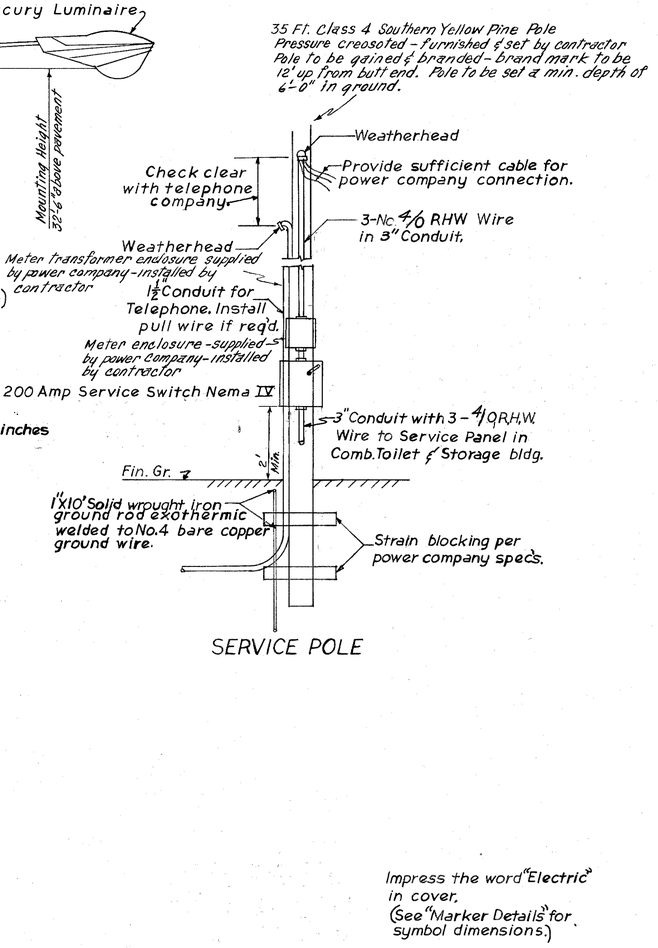
ROADWAY AND RAMP STANDARD



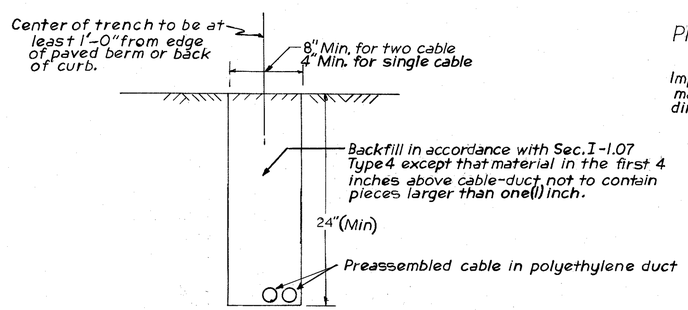
PICNIC AREA STANDARD



PARKING AREA STANDARD



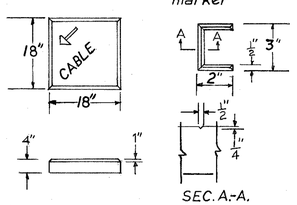
SERVICE POLE



CABLE-DUCT TRENCH DETAIL

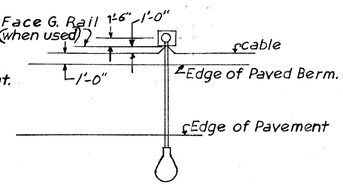
Impress arrow on top of marker to indicate cable direction.

Dimensions shown are for all symbols impressed in marker



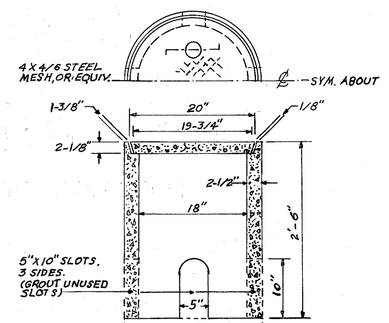
MARKER DETAIL
~ applies ~
(a) Crossover end where pull box is not warranted.
(b) Abrupt change in direction of direct burial cable.
(c) End of Special Conduit run.

Note:
Impress the word "Conduit" To indicate conduit (initial & future lighting).
"Cable" - To indicate abrupt change in cable-duct.
"Light" - To locate cable-duct coil for future light.



ROADWAY CABLE LOCATION

Impress the word "Electric" in cover. (See "Marker Details" for symbol dimensions.)



CONCRETE PIPE PULL BOX
Note: Appoved Fiber Pull Box may be used in lieu of the above.

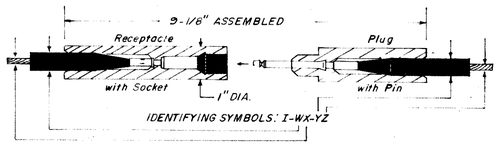
JUN 14 1963

PREBLE COUNTY PRE-70-2.47 LIGHTING DETAILS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

48A
62

PREBLE COUNTY
PRE-70-2.47



TO IDENTIFY THE PROPER KIT FOR AN INSTALLATION, SELECT FROM THE TABLES BELOW THE SYMBOLS WHICH COINCIDE WITH THE REQUIREMENTS and SUBSTITUTE FOR (W,X) and (Y,Z) RESPECTIVELY.

EXAMPLE

IF THE INSTALLATION REQUIRES A RECEPTACLE FOR NO. 6 STRANDED CONDUCTOR and A CABLE DIA. OF .660" and A PLUG FOR NO. 8 SOLID CONDUCTOR and A CABLE DIA. OF .460", THE KIT NO. IS I-F3-E6.

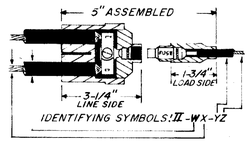
CONDUCTOR SIZE AWG NO.		SYMBOL FOR X and Z
Concentric Stranded	Solid	
10, 12	8, 10	6
8	6	4
6	4	3
4	–	2

CABLE DIA.		SYMBOL FOR W and Y
MIN.	MAX.	
.195"	.260"	B*
.250"	.330"	C*
.320"	.430"	D*
.420"	.585"	E
.575"	.785"	F
.775"	.985"	G
.975"	1.125"	H

DIAMETERS VARY ALONG CABLE LENGTHS. TAKE SEVERAL MEASUREMENTS. SELECT A TIGHT FIT RATHER THAN A LOOSE ONE.

*MOLDED RUBBER ADAPTERS ARE A PART OF THESE KITS FOR SMALL DIA. CABLE.

TYPE I
INLINE SELF LOCKING CONNECTOR KIT FOR PULL BOX INSTALLATION.

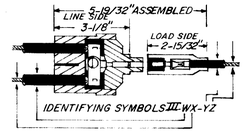


FOR LIGHT AT END OF A CIRCUIT, PLUG ONE OPENING WITH INSULATED PLUG HAVING SAME DIAMETER AS CABLE.
ANY STANDARD MIDGET, FERRULE TYPE, FUSE MAY BE USED IN THIS CONNECTOR. A FUSE CAPABLE OF INTERUPTING THE SHORT CIRCUIT CAPACITY OF THE SUPPLY CIRCUIT MUST BE USED.

(X) CONDUCTOR SIZE AWG NO.		SYMBOL FOR X	(Z) CONDUCTOR SIZE AWG NO.		SYMBOL FOR X	(W) CABLE DIA.		SYMBOL FOR X	(Y) CABLE DIA.		SYMBOL FOR Y
Concentric Stranded	Solid		Concentric Stranded	Solid		MIN.	MAX.		MIN.	MAX.	
–	8	6	14, 16	12, 14	8	.250"	.330"	C	.120"	.160"	S
8	6	4	10, 12	8, 10	6	.320"	.380"	DA	.155"	.205"	A
6	4	3	8	6	4	.370"	.430"	DB	.195"	.260"	B
4	–	2	6	4	3	.420"	.505"	EA	.250"	.330"	C
2	–	1				.495"	.585"	EB	.320"	.430"	D
1	–	0				.575"	.685"	FA			
1/0	–	10				.675"	.785"	FB			
2/0	–	20									

DIAMETERS VARY ALONG CABLE LENGTHS. TAKE SEVERAL MEASUREMENTS. SELECT A TIGHT FIT RATHER THAN A LOOSE ONE.

TYPE II
FUSED "Y" CONNECTOR KIT FOR POLE BASE INSTALLATION.



FOR LIGHT AT END OF A CIRCUIT, PLUG ONE OPENING WITH INSULATED PLUG. HAVING SAME DIAMETER. TO IDENTIFY THE PROPER KIT FOR AN INSTALLATION, SELECT FROM THE TABLES BELOW THE SYMBOLS WHICH COINCIDE WITH THE REQUIREMENTS and SUBSTITUTE FOR (W,X) and (Y,Z) RESPECTIVELY.

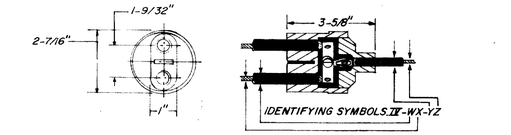
EXAMPLE

IF THE LINE SIDE CABLES ARE NO. 2 STRANDED CONDUCTOR WITH AN OUTSIDE DIAMETER OF .54", and THE LOAD SIDE CABLE IS NO. 12 STRANDED CONDUCTOR WITH AN OUTSIDE DIAMETER OF .29", THE KIT NO. IS 3-EB1-C6.

(X) CONDUCTOR SIZE AWG NO.		SYMBOL FOR X	(Z) CONDUCTOR SIZE AWG NO.		SYMBOL FOR X	(W) CABLE DIA.		SYMBOL FOR W	(Y) CABLE DIA.		SYMBOL FOR Y
Concentric Stranded	Solid		Concentric Stranded	Solid		MIN.	MAX.		MIN.	MAX.	
–	8	6	14, 16	12, 14	8	.250"	.330"	C	.120"	.160"	S
8	6	4	10, 12	8, 10	6	.320"	.380"	DA	.155"	.205"	A
6	4	3	8	6	4	.370"	.430"	DB	.195"	.260"	B
4	–	2	6	4	3	.420"	.505"	EA	.250"	.330"	C
2	–	1				.495"	.585"	EB	.320"	.430"	D
1	–	0				.575"	.685"	FA			
1/0	–	10				.675"	.785"	FB			
2/0	–	20									

DIAMETERS VARY ALONG CABLE LENGTHS. TAKE SEVERAL MEASUREMENTS. SELECT A TIGHT FIT RATHER THAN A LOOSE ONE.

TYPE III
UNFUSED "Y" CONNECTOR KIT FOR POLE BASE INSTALLATION.



TO IDENTIFY THE PROPER KIT FOR AN INSTALLATION, SELECT FROM THE TABLES BELOW THE SYMBOLS WHICH COINCIDE WITH THE REQUIREMENTS and SUBSTITUTE FOR (W,X) and (Y,Z) RESPECTIVELY.

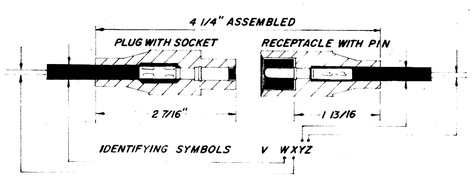
EXAMPLE

IF THE TWIN CABLES ARE NO.2 STRANDED CONDUCTOR WITH AN OUTSIDE DIA. OF .54" and THE SINGLE CABLE IS NO. STRANDED CONDUCTOR WITH AN OUTSIDE DIA. OF .29", THE KIT NO. IS 4-EB1-C6.

(X) CONDUCTOR SIZE(X) AWG NO.		SYMBOL FOR X	(Z) CONDUCTOR SIZE (Z) AWG NO.		SYMBOL FOR Z	(W) CABLE DIA.		SYMBOL FOR W	(Y) CABLE DIA.		SYMBOL FOR Y
Concentric Stranded	Solid		Concentric Stranded	Solid		MIN.	MAX.		MIN.	MAX.	
–	8	6	14, 16	12, 16	8	.250"	.330"	C	.155"	.205"	A
8	6	4	10, 12	8, 10	6	.320"	.380"	DA	.195"	.260"	B
6	4	3	8	6	4	.370"	.430"	DB	.250"	.330"	C
4	–	2	6	4	3	.420"	.505"	EA	.320"	.430"	D
2	–	1	4	–	2	.495"	.585"	EB	.420"	.585"	E
1	–	0	2	–	1	.575"	.685"	FA	.575"	.785"	F
1/0	–	10	1	–	0	.675"	.785"	FB			
2/0	–	20									

DIAMETERS VARY ALONG CABLE LENGTHS. TAKE SEVERAL MEASUREMENTS. SELECT A TIGHT FIT RATHER THAN A LOOSE ONE.

TYPE IV
UNFUSED "Y" CONNECTOR KIT FOR PULL BOX INSTALLATION



TO IDENTIFY THE PROPER KIT FOR AN INSTALLATION, SELECT FROM THE TABLES BELOW THE SYMBOLS WHICH COINCIDE WITH THE REQUIREMENTS AND SUBSTITUTE FOR (W,X) AND (Y,Z) RESPECTIVELY.

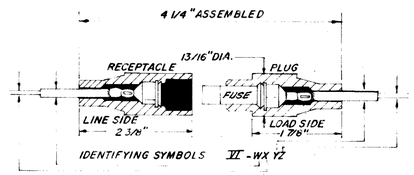
EXAMPLE: IF THE INSTALLATION REQUIRES A PLUG FOR NO. 8 STRANDED CONDUCTOR AND A CABLE DIAMETER OF .38" AND A RECEPTACLE FOR NO. 14 STRAND CONDUCTOR AND A CABLE DIAMETER OF .27", THE KIT NO. IS V-D4-C8.

Conductor Size AWG		Symbol for X and Z
Concentric Strd.	Solid	
14, 16	12, 14	8
10, 12	8, 10	6
8	6	4
6	4	3

Cable Diameter		Symbol for W and Y
MIN.	MAX.	
.155"	.205	A
.195	.260	B
.250	.330	C
.320	.430	D

DIAMETERS VARY ALONG CABLE LENGTHS. TAKE SEVERAL MEASUREMENTS. SELECT A TIGHT FIT RATHER THAN A LOOSE ONE.

TYPE V
UNFUSED INLINE CONNECTOR KIT FOR JUNCTION BOX INSTALLATION.



TO IDENTIFY THE PROPER KIT FOR THE INSTALLATION, SELECT FROM THE THE SYMBOLS WHICH COINCIDE WITH THE REQUIREMENTS AND SUBSTITUTE FOR (W,X) and (Y,Z) RESPECTIVELY.

EXAMPLE: IF THE INSTALLATION REQUIRES A RECEPTACLE FOR THE LINE SIDE FOR NO.6 STRANDED CONDUCTOR AND A CABLE DIAMETER OF .42" AND A PLUG FOR THE FUSE FOR THE LOAD SIDE FOR NO.12 STRANDED CONDUCTOR AND A CABLE DIAMETER OF .29", THE KIT NO. IS VI-D3-C6.

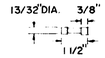
Conductor Size AWG		Symbol for X and Z
Concentric Strd.	Solid	
14, 16	12, 14	8
10, 12	8, 10	6
8	6	4
6	4	3

Cable Diameter		Symbol for Y and W
MIN.	MAX.	
.120"	.160"	S
.155	.205	A
.195	.260	B
.250	.330	C
.320	.430	D

DIAMETERS VARY ALONG CABLE LENGTHS. TAKE SEVERAL MEASUREMENTS. SELECT A TIGHT FIT RATHER THAN A LOOSE ONE.

TYPE VI
FUSED INLINE CONNECTOR KIT FOR JUNCTION BOX INSTALLATION.

MIDGET SIZE FUSE



MIDGET FUSES ARE AVAILABLE IN THE FOLLOWING CAPACITIES:-
600 VOLTS OR LESS, 1/10 TO 30 AMPS.

ANY STANDARD MIDGET, FERRULE TYPE FUSE, (EXCEPT GLASS TUBE) MAY BE USED IN THIS CONNECTOR.
A FUSE CAPABLE OF INTERRUPTING THE SHORT CIRCUIT CAPACITY OF THE SUPPLY CIRCUIT MUST BE USED.

JUN 14 1965

Location and Design, Lighting Section, Dwg. No. RL-SK-49 8-9-63

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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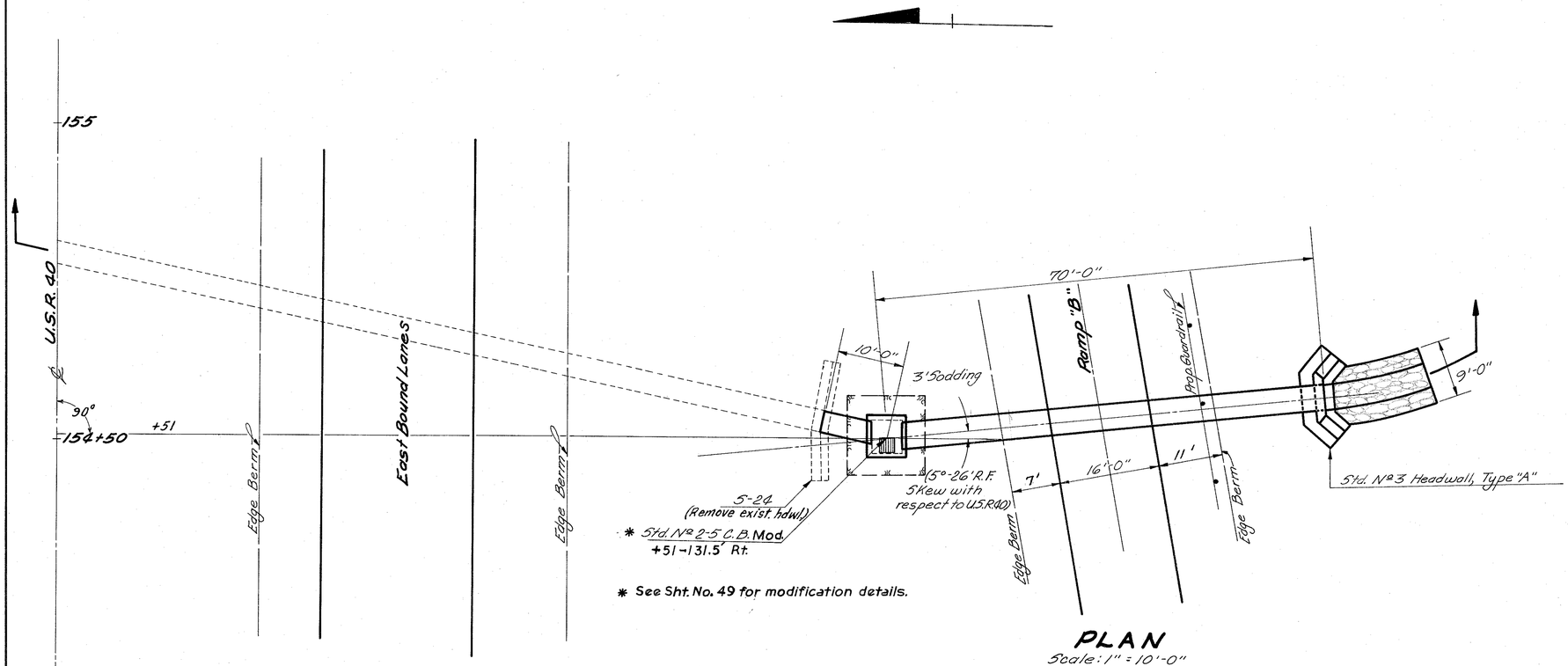
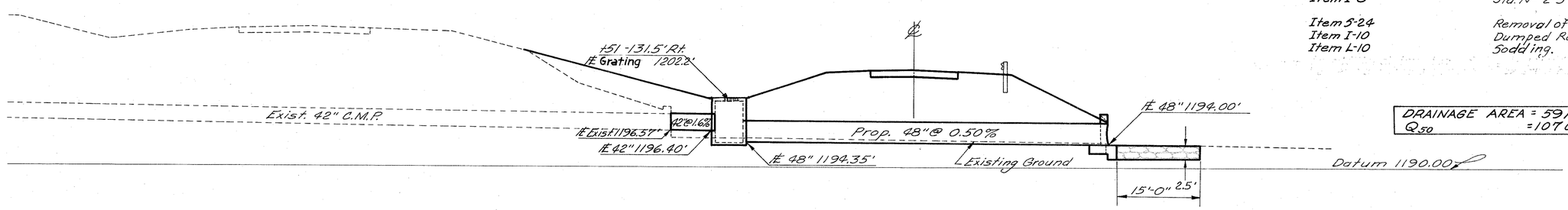
PREBLE COUNTY
PRE-70-2.47



* See Sht. No. 49 for modification details.

PLAN
Scale: 1" = 10'-0"



SECTION A-A
Scale: 1" = 10'-0"

CULVERT DATA

TYPE: Pipe Culvert.
SIZE: 42"x10' & 48"x70'.
WORK REQD: Existing 42" C.M.P build Nº 2-5 C.B., build 48"x70' pipe with Headwall. Grade outlet channel as shown to allow proper drainage and place dumped rock channel protection as shown. Existing pipe shall be separated from the existing headwall (to be removed) by a cutting torch.

ESTIMATED QUANTITIES

Item I-1	42" Pipe, Class A-1 M-6.4(d)	10 Lin. Ft.
Item I-1	48" Pipe, Class A-1	70 Lin. Ft.
Item I-2	Masonry.	8.5 Cu. Yd.
Item I-8	Std. Nº 2-5 Catch. Basin Modified	1 Each
Item S-24	Removal of Existing Structure.	Lump
Item I-10	Dumped Rock Channel Protection.	12.5 Cu. Yd.
Item L-10	Sodding.	12.4 Sq. Yd.

DRAINAGE AREA = 59 Acres
Q50 = 107 C.F.S.

PIPE CULVERT
STATION 154+77
STRUCT. Nº PRE-70-0293 EXTENSION RT.

JUN 14 1965

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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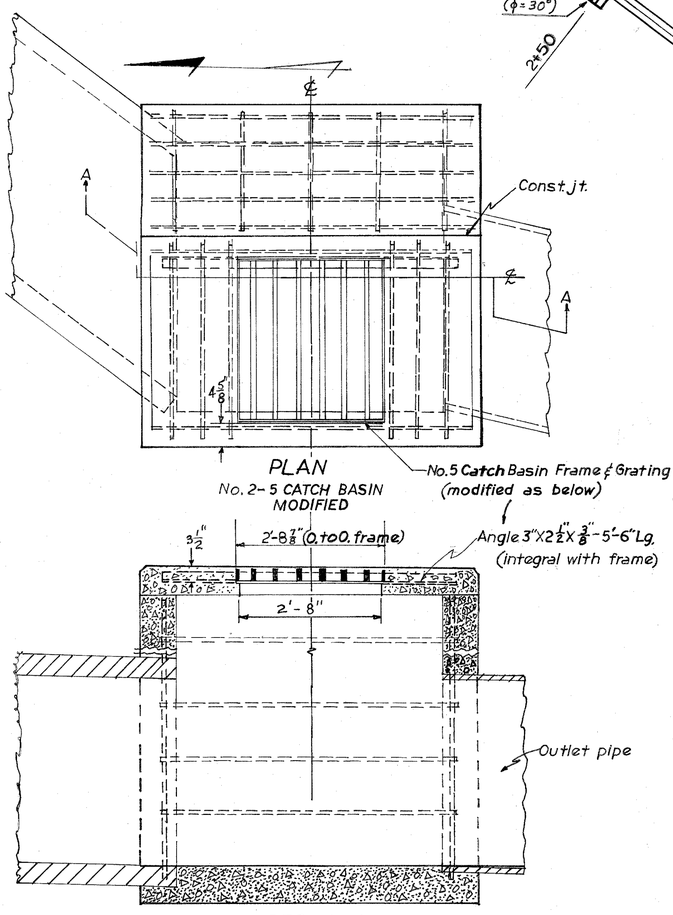
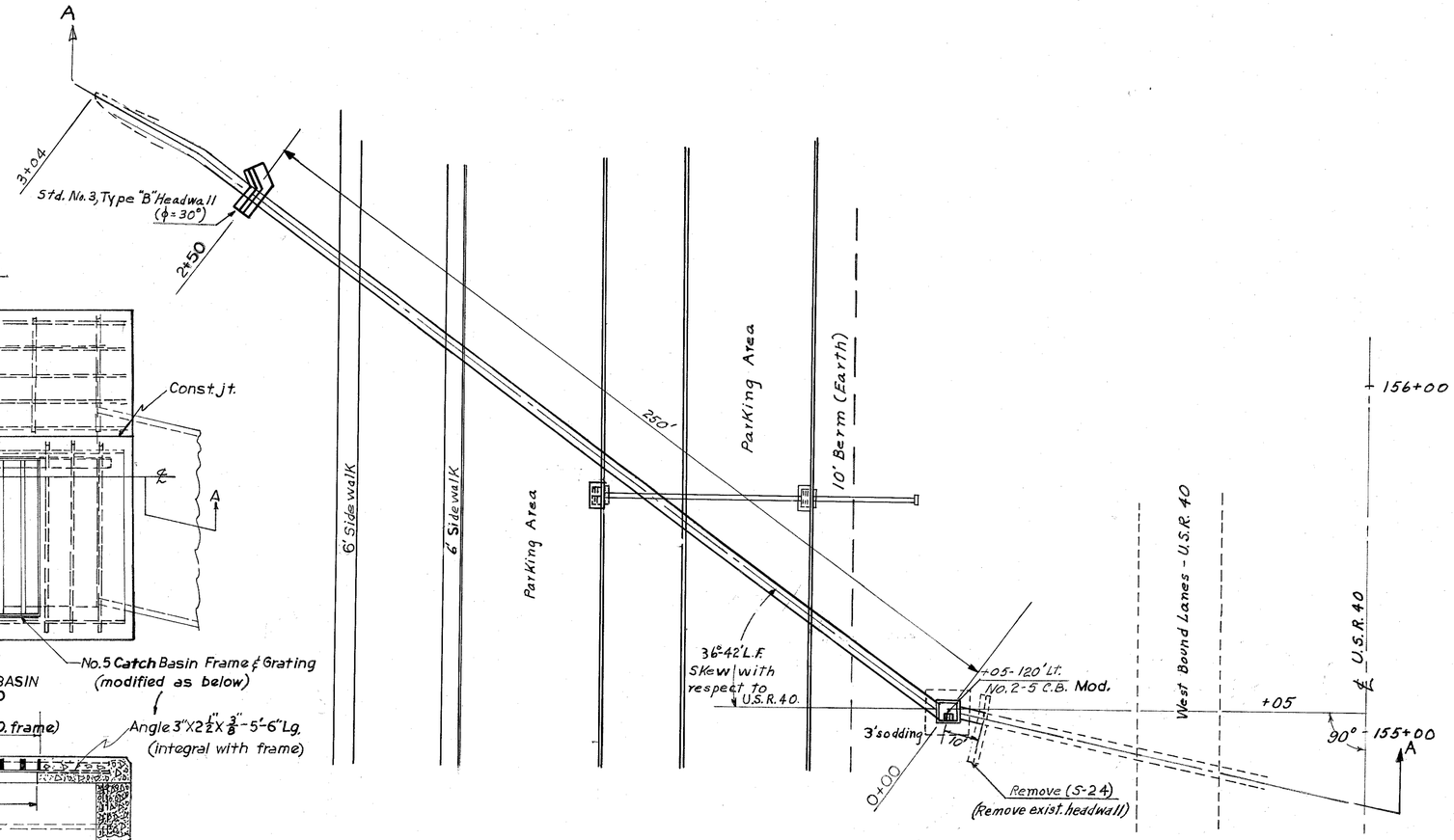
PREBLE COUNTY
PRE-70-247





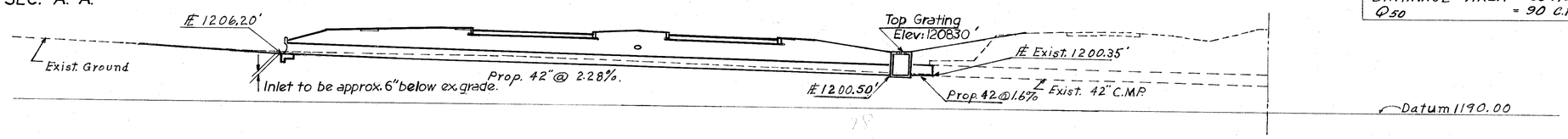
PLAN
Scale: 1" = 20'-0"

CULVERT DATA

TYPE: Pipe
SIZE: 42" X 250' and 42" X 10'
WORK REQD: Extend existing 42" C.M.P. build new No. 2-5 Catch Basin, build 42" X 250' pipe culvert with No. 3 Type "B" Headwall. Excavate inlet channel as shown to allow proper drainage. Existing pipe shall be separated from the existing headwall (to be removed) by a cutting torch.

ESTIMATED QUANTITIES

Item I-1	42" Pipe, Class A-1,	250 Lin. Ft.
Item I-1	42" Pipe, Class A-1, See M-6.4(d)	10 Lin. Ft.
Item I-2	Masonry	7.3 Cu. Yds.
Item I-8	No. 2-5 Catch Basin Modified	1 Each
Item 5-24	Removal of Existing Structure.	Lump
Item L-10	Sodding	12.4 Sq. Yds.



SECTION A-A
Scale: 1" = 20'-0"

DRAINAGE AREA = 53 Acres
Q50 = 90 C.F.S.

PIPE CULVERT
STATION 154+77
STRUCT. No. PRE-70-0293 EXTENSION LT

JUN 14 1965

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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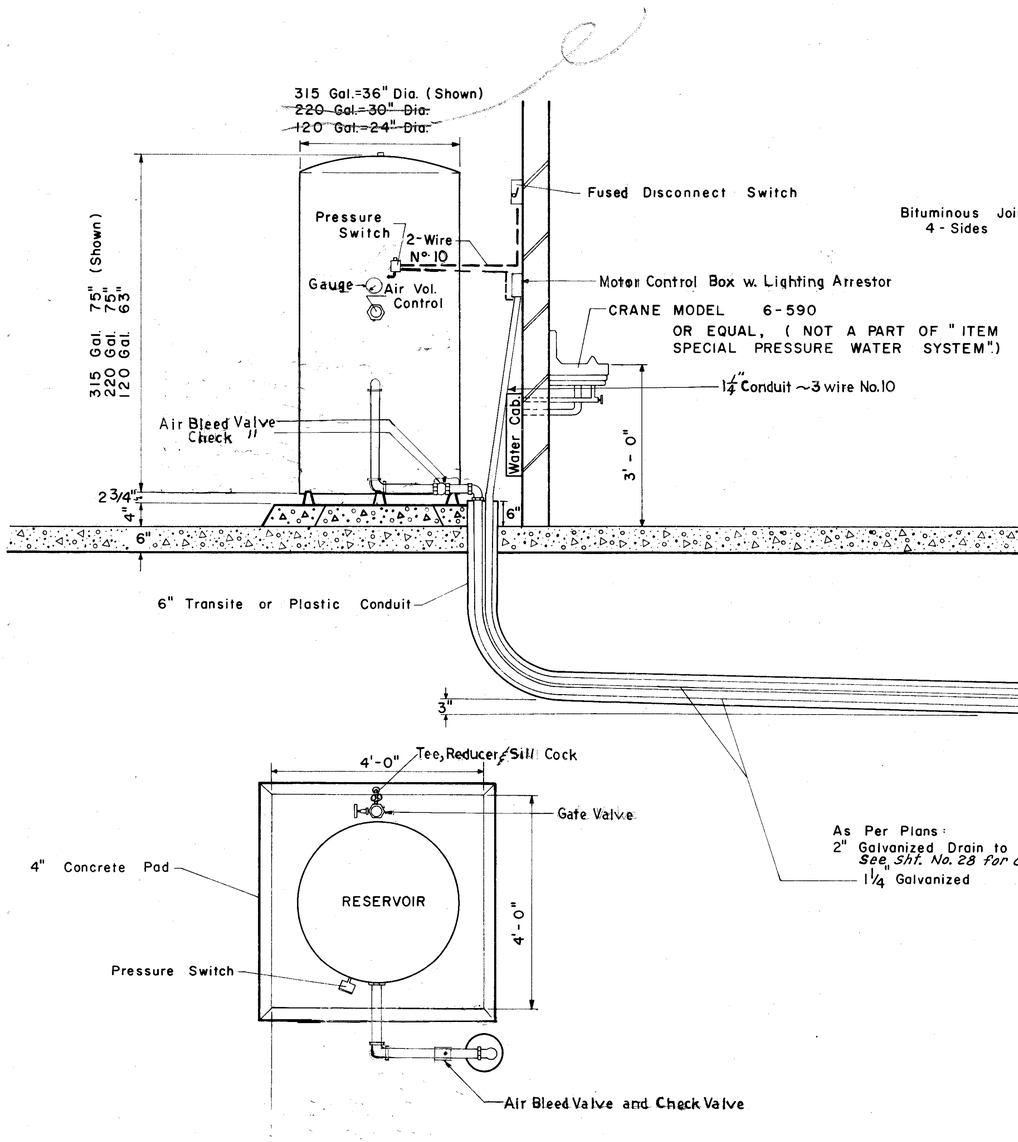
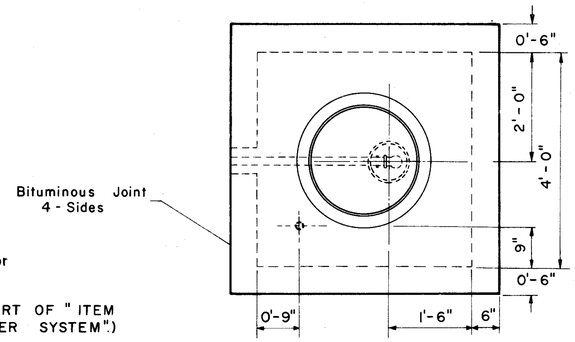
PREBLE COUNTY
PRE-70-2.47

WATER RESERVOIR



PLAN



PLAN

SECTION

BILL OF MATERIALS

* 1 MEYERS MODEL SE10A-21 Submersible 1HP 230Volt Pump Complete or Equal. ~~Deming No. 6720-Units A&B4 or Equal.~~

* 1 MEYERS MODEL V-315E VERTICAL "FIRE-CURED" EPOXY COATED PRESSURE TANK OR ~~EQUAL~~. Deming 315 gallon galvanized Pressure Tank or Equal.

* 1 SANITARY WELL SEAL WITH WELL VENT. GALVANIZED PIPE AND FITTINGS FROM PUMP TO PRESSURE TANK.
GALVANIZED PIPE FROM PUMP TO TANK
4" CONCRETE PAD FOR PRESSURE TANK.

NOTES:

- GALVANIZED PIPE SHALL BE SCHEDULE 40 GRADE A - 53.
- 4" CONCRETE PAD FOR PRESSURE TANK MAY BE POURED INTEGRAL WITH CONCRETE FLOORS.
- PAYMENT FOR THE WELL PIT, MANHOLE COVER, AND 2" GALVANIZED PIPE DRAINS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM SPECIAL, ROADSIDE TOILET AND STORAGE UNIT.
- PAYMENT FOR CUTTING OR EXTENDING WELL CASING IN PLACE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM "PRESSURE WATER SYSTEM".

* PAYMENT INCLUDED IN UNIT PRICE BID FOR " ITEM SPECIAL PRESSURE WATER SYSTEM".

Scale ¾" = 1'-0"

Rev. 8-6-70

BUREAU OF LOCATION & DESIGN
OHIO DEPARTMENT OF HIGHWAYS

ROADSIDE REST AREA WATER SYSTEM

DATE

STANDARD CONSTRUCTION DRAWING

JUN 14 1965

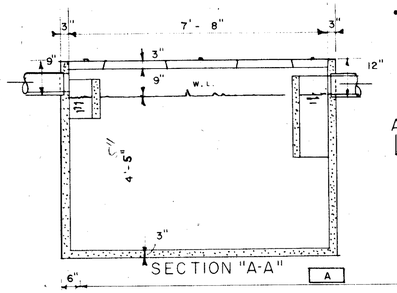
CHECKED	DRAWN-TRACED W.B.B.	ENGR. L. & D.

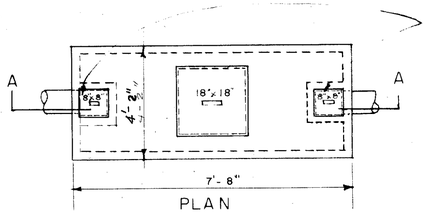
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

53/62

PREBLE COUNTY
PRE-70-2.47

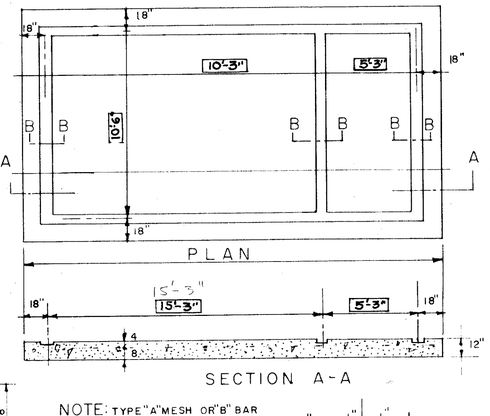
TRASH TRAP



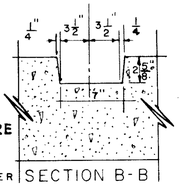


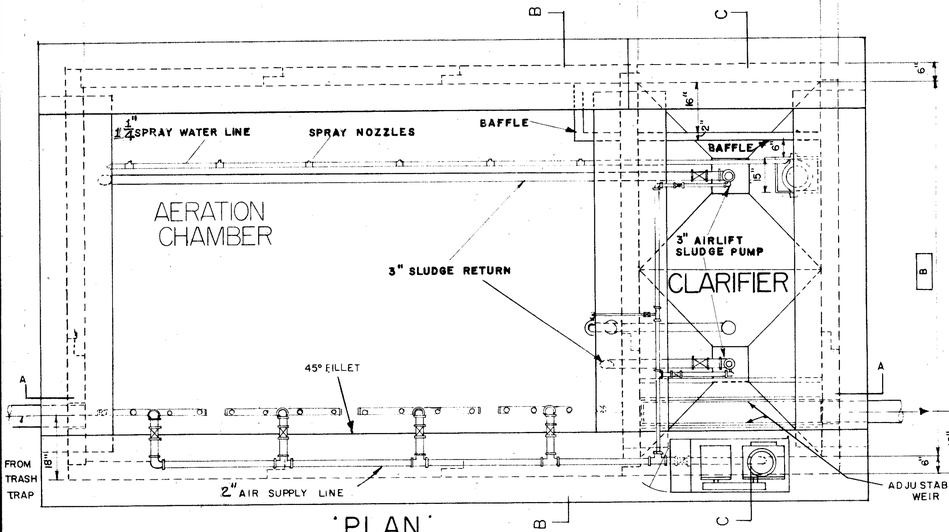
24" ID RISER OF PRECAST CONCRETE OR VITRIFIED TILE WITH CAP SHALL EXTEND 48" ABOVE FLOW LINE.

CONCRETE SLAB



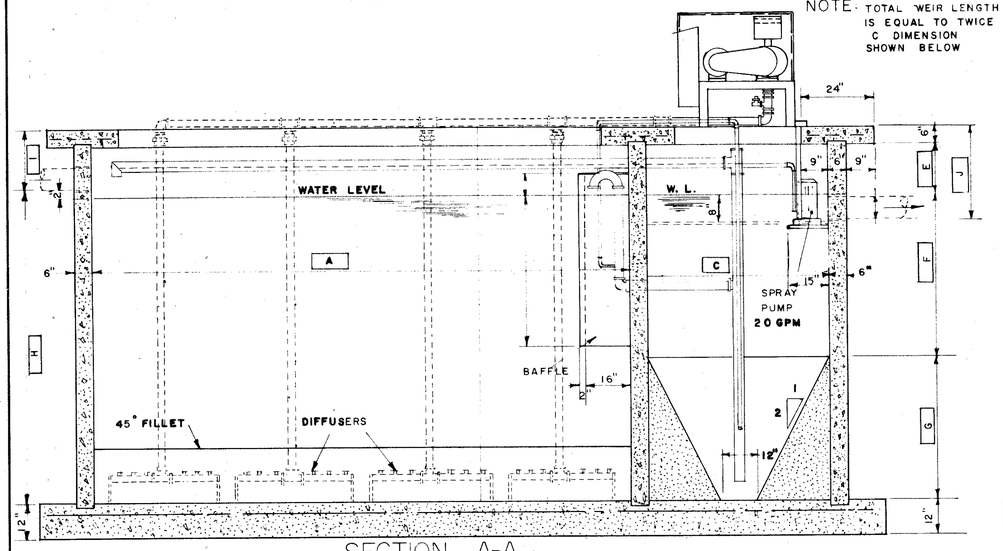
NOTE: TYPE "A" MESH OR "B" BAR MESH AS PER STANDARD DRAWING B-T-71R



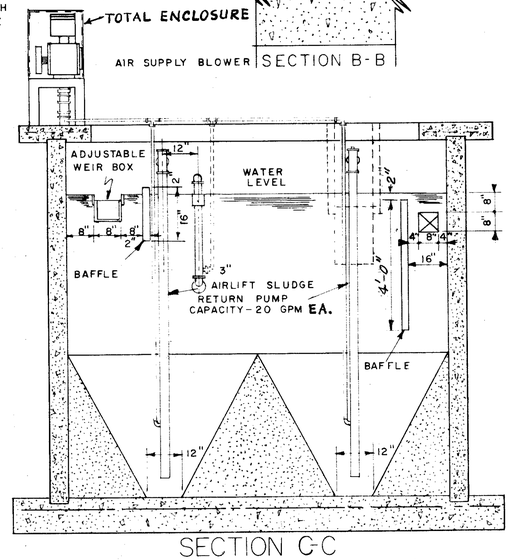


PLAN

NOTE: TOTAL WEIR LENGTH IS EQUAL TO TWICE C DIMENSION SHOWN BELOW



SECTION A-A



SECTION C-C

MODEL NO.	DESIGN FLOW GPD	AERATION VOL. GAL.	CLARIFIER VOL. GAL.	BLOWER CFM	BLOWER HP	DIMENSIONS A	B	C	D	E	F	G	H	I	J	K
PCW 100-33-3	10,000	16,000	1,670	50	3	14'-9"	10'-0"	4'-9"	9'-6"	2'-1½"	6"	4'-0"	9'-8"	2'-5½"	3'-3½"	

AER-O-FLO AEROBIC SEWAGE TREATING PLANT

GENERAL: FURNISH AND INSTALL ONE FACTORY BUILT WASTE TREATMENT PLANT, COMPLETE AND READY FOR OPERATION IN ACCORDANCE WITH PLANS AND SPECIFICATIONS STATED HEREIN. THE PLANT SHALL BE AN AER-O-FLO MODEL PCW100-33-3 MANUFACTURED BY CENTRAL STATES SEWAGE SYSTEMS, INC. THE WASTE TREATMENT PLANT SHALL BE OF THE ACTIVATED SLUDGE TYPE, SPECIFICALLY KNOWN AS "AEROBIC DIGESTION," CAPABLE OF TREATING 10000 GALLONS PER DAY DOMESTIC SEWAGE OF 210 PARTS PER MILLION 5 DAY B.O.D. FROM COMPOSITE SAMPLES OF THE AVERAGE DAILY FLOW. THE COMPLETE PLANT SHALL INCLUDE SCREENING, AERATION, AND SECONDARY SEDIMENTATION.

SCREENING: ALL RAW WASTE TRIBUTARY TO THE PLANT SHALL PASS THROUGH A 1000 GALLON TRASH TRAP.

AIR SUPPLY: DIFFUSER AIR SHALL BE SUPPLIED BY A POSITIVE DISPLACEMENT BLOWER OF AMPLE SIZE TO PROVIDE A MINIMUM OF 2100 CUBIC FEET OF AIR FOR EACH POUND OF B.O.D. APPLIED, AND A MINIMUM OF 3 CUBIC FEET OF AIR PER LINEAR FOOT OF AERATION TANK LENGTH. ITS RATED CAPACITY SHALL BE BASED UPON THE HOURLY RATE OF B.O.D. APPLICATION AND TANK SIZE TO MAINTAIN CLEANSING VELOCITIES. THE BLOWER SHALL HAVE A 24 HOUR TIME CLOCK TO VARY THE AIR SUPPLY WITH THE DEMAND AND SHALL DELIVER 50 CFM @ 4 PSI.

DIFFUSERS: THERE SHALL BE A MINIMUM OF ONE AER-O-FLO NON-CLOG DIFFUSER FOR EVERY 6" OF AERATION TANK LENGTH. THESE DIFFUSERS SHALL BE PARALLEL TO AND NEAR THE BASE OF THE FILLET AND AT AN ELEVATION WHICH WILL PROVIDE THE OPTIMUM ROLL OF THE TANK CONTENT.

AERATION TANK: THE AERATION TANK SHALL BE OF SUFFICIENT CAPACITY TO PROVIDE A 24 HOUR PERIOD OF RETENTION AND A MINIMUM VOLUME OF 80 CUBIC FEET PER POUND OF B.O.D. THE BOTTOM OF THE TANK SHALL BE FILLETED ON TWO SIDES TO PREVENT SLUDGE ACCUMULATION.

BLOWER, MOTOR DRIVE AND CONTROLS: UNIT SHALL CONSIST OF ONE 3 HP, 1410 RPM, VOLT, PHASE, 60 CYCLE, WEATHERPROOF MOTOR, WITH WEATHERPROOF V-BELT DRIVE, MAGNETIC STARTER WITH H.O.A. SELECTOR SWITCH. CONTROLS SHALL BE MOUNTED IN WEATHERPROOF ENCLOSURE EQUIPPED WITH LOCKING DEVICE.

FINAL SETTLING AND SLUDGE RETURN: THE FINAL TANK SHALL BE OF AMPLE SIZE TO PROVIDE A MINIMUM OF FOUR HOURS RETENTION, BASED UPON THE SAME FLOW RATE GOVERNING THE AERATION TANK AND SHALL HAVE PROPER BAFFLING. THE TOTAL SETTLING VOLUME SHALL INCLUDE THE VOLUME OF THE UPPER 1/3 OF THE SLUDGE HOPPER. THE SLOPE OF THE HOPPER WALLS SHALL NOT BE LESS THAN 1.5 VERTICAL TO 1.0 HORIZONTAL. SETTLED SLUDGE SHALL BE RETURNED FROM THE FINAL SETTLING TANK TO THE AERATION CHAMBER BY DUPLICATE AIR LIFT ASSEMBLIES CONSISTING OF TWO AIR LIFT PUMPS ACTUATED BY THE BLOWER. EACH AIR LINE SUPPLYING AIR TO THE SLUDGE PUMP SHALL BE EQUIPPED WITH A NEEDLE VALVE TO VARY THE CAPACITY OF THE AIR LIFT PUMPS. EACH PUMP SHALL HAVE A MINIMUM CAPACITY OF 20 GPM.

SKIMMING DEVICE: AN AIRLIFT SKIMMING DEVICE SHALL BE LOCATED NEAR THE OUTLET WEIR TO RETURN FLOATING MATERIAL TO THE AERATION TANK. THE AIR LINE SUPPLYING AIR TO THE SKIMMING DEVICE SHALL BE EQUIPPED WITH A NEEDLE VALVE TO REGULATE THE AMOUNT OF RETURN.

FROTH CONTROL: A 1/3 HP, 110-220 VOLT, SINGLE PHASE, 20 GPM FROTH CONTROL PUMP SHALL BE PROVIDED IN CLARIFIER AND SUFFICIENT SPRAYS ATTACHED TO THE DISCHARGE SIDE OF THE PUMP TO INSURE CONTROL OF FROTHING OR FOAMING IN THE AERATION CHAMBER. THE SPRAY NOZZLES SHALL HAVE A MINIMUM 1" OPENING TO PREVENT CLOGGING AND SHALL PRODUCE A SHARP SPRAY PATTERN ALONG ENTIRE LENGTH OF AERATION TANK. A HOSE BIB SHALL BE FURNISHED BETWEEN THE DISCHARGE SIDE OF PUMP AND SPRAY NOZZLES SHUT OFF VALVE TO PROVIDE WASH UP WATER IF REQUIRED.

PREFABRICATED CONCRETE TANKS: THE PREFABRICATED CONCRETE TANKS SHALL BE COMPRISED OF 6" MINIMUM THICKNESS REINFORCED CONCRETE SLABS, BOLTED AT THE JOINTS AND KEYED INTO THE POURED CONCRETE FOUNDATION SLAB. JOINTS SHALL BE GASKETED AND SEALED AND BE MINIMUM IN NUMBER TO PROVIDE WATERTIGHT WALLS. STRUCTURAL STABILITY SHALL BE OBTAINED BY USE OF PRECAST, KEYED, WALL CAP BEAMS AND STRUTS AS REQUIRED. THE POURED AND KEYED FOUNDATION SLAB SHALL BE PROVIDED IN THE FIELD. ALL PREFABRICATED CONCRETE SHALL HAVE A 5000 LBS. 28 DAY COMPRESSION STRENGTH AND BE REINFORCED WITH CONTINUOUS SPECIAL WELDED WIRE FABRIC CONSISTING OF NO. 3 BARS @ 6" CTS. LONGITUDINALLY AND NO. 3 BARS @ 12" CTS. TRANSVERSELY. WITH ADDITIONAL NO. 6 BARS WHERE REQUIRED.

TANK COVER GRATING: EXPANDED METAL GRATING PANELS SHALL BE PROVIDED FOR ALL TANK OPENINGS. THESE PANELS SHALL CONSIST OF 3/4" X NO. 9 EXPANDED METAL GRATING (NOT FLATENED) WELDED TO 1½" X 1½" X 3/16" ANGLE FRAMES. THE UNIT SHALL BE HOT DIP GALVANIZED AFTER MILL SCALE AND GREASE IS REMOVED.

FIELD SERVICE: A FACTORY TRAINED REPRESENTATIVE SHALL BE PROVIDED TO START THE PLANT, INSTRUCT THE OPERATOR, AND MAKE PERIODIC INSPECTIONS FOR A PERIOD OF ONE YEAR.

JUN 14 1965
7-17-65

SEWAGE TREATMENT PLANT

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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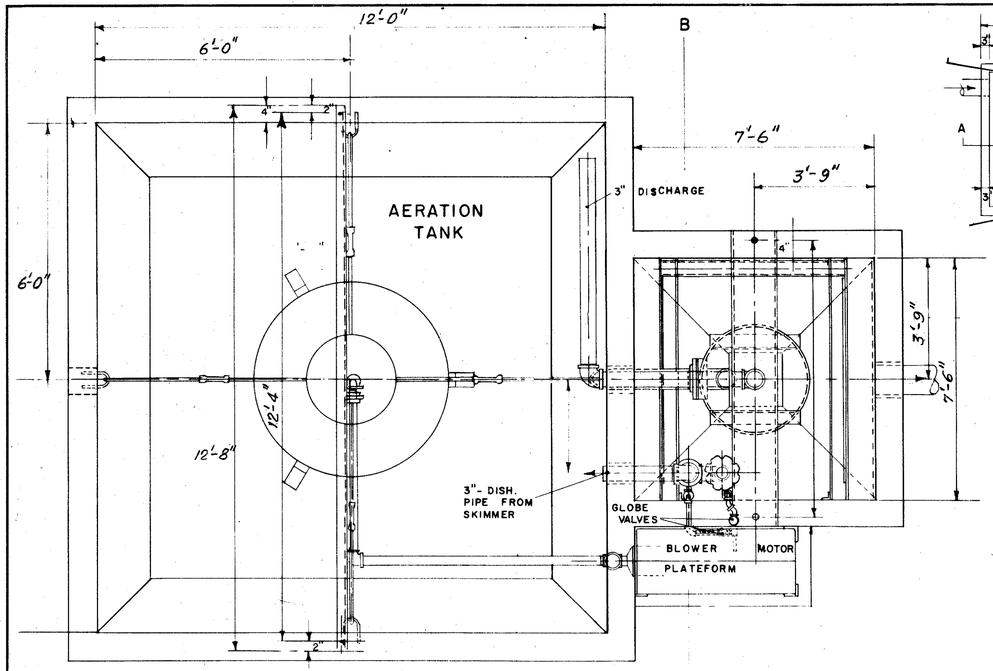
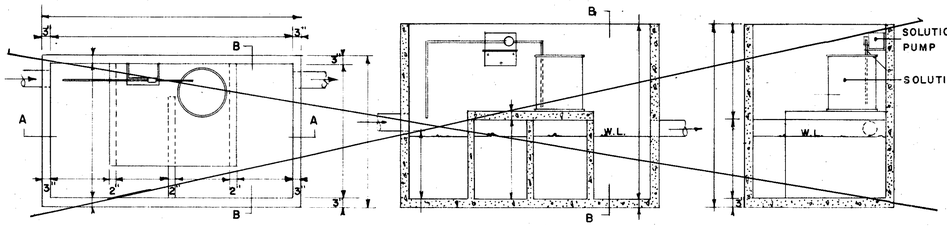
PREBLE COUNTY
PRE-70-2.47

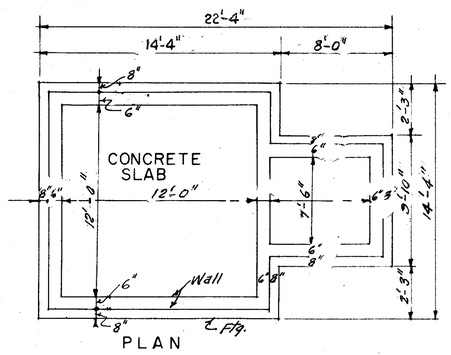


PLAN



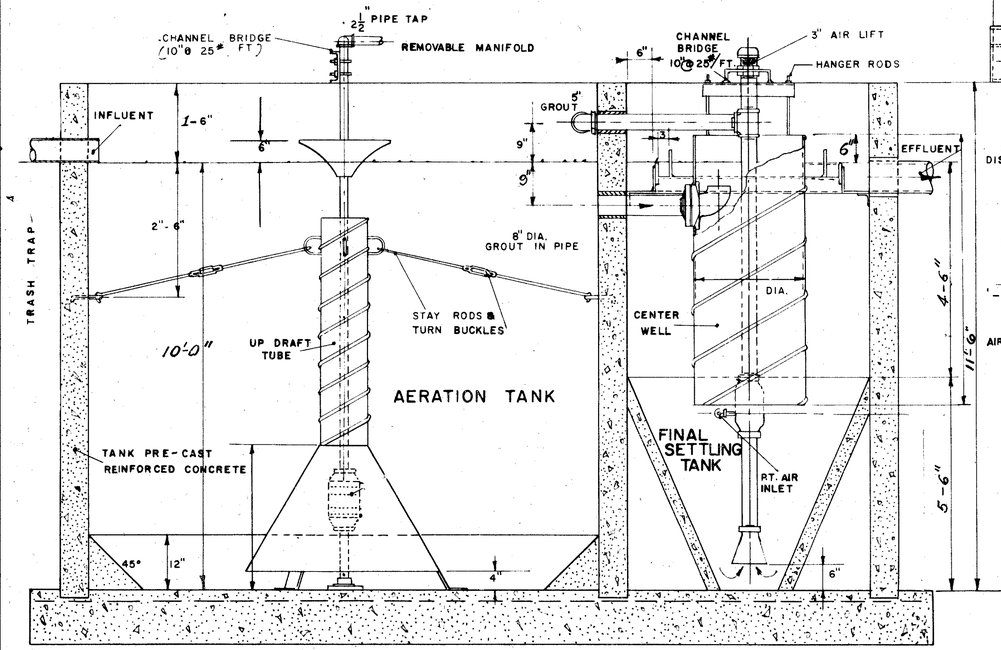
PLAN SECTION A-A SECTION B-B

~~PRECAST CHLORINE CONTACT TANK~~

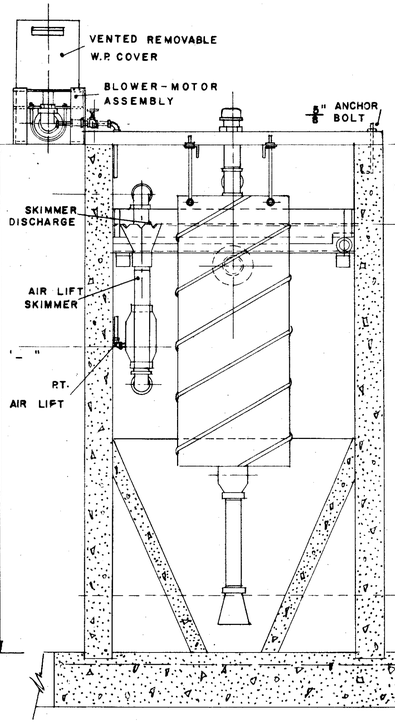


PLAN

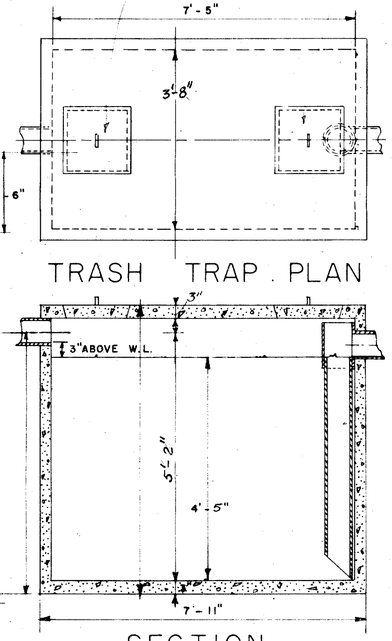
24" RISER OF PRECAST CONCRETE OR VITRIFIED TILE WITH CAP SHALL EXTEND 36" ABOVE TANK TOP



SECTION "A"-"A"



SECTION "B"-"B"



SECTION

YEO-WAVE AEROBIC SEWAGE TREATING PLANT

GENERAL: FURNISH AND INSTALL ONE FACTORY BUILT WASTE TREATMENT PLANT COMPLETE AND READY FOR OPERATION IN ACCORDANCE WITH PLANS AND SPECIFICATIONS STATED HEREIN. THE PLANT SHALL CONSIST OF YEO-WAVE MODEL B-100 AS MANUFACTURED BY YEOMANS BROTHERS COMPANY, OF MELROSE PARK, ILLINOIS, AND PRE-CAST AERATION, AND SETTLING TANKS AS MANUFACTURED BY ASHLAND VAULT INC., OF ASHLAND, OHIO. THE WASTE TREATMENT PLANT SHALL BE OF THE ACTIVATED SLUDGE TYPE, SPECIFICALLY KNOWN AS "AEROBIC DIGESTION", CAPABLE OF TREATING 10,000 GALLONS PER DAY DOMESTIC SEWAGE OF 210 PARTS PER MILLION 5 DAY B.O.D. FROM COMPOSITE SAMPLES OF THE AVERAGE DAILY FLOW. THE COMPLETE PLANT SHALL INCLUDE SCREENING, AERATION, AND SECONDARY SEDIMENTATION.

SCREENING: ALL RAW WASTE TRIBUTARY TO THE PLANT SHALL PASS THROUGH A 1,000 GALLON TRASH TRAP.

PLANT CONSTRUCTION AND ERECTION: FURNISH AND COMPLETELY INSTALL ON THE REINFORCED CONCRETE BASE POURED BY CONTRACTOR, A PREFABRICATED REINFORCED CONCRETE TANK, CONSISTING OF AN AERATION CHAMBER AND A FINAL SETTLING CHAMBER. TANK TO BE CONSTRUCTED OF PRE-CAST REINFORCED CONCRETE PANELS, SIX INCHES THICK, WITH SEALING GASKET IN HORIZONTAL TONGUE AND GROVE JOINTS, GASKETS AND GALVANIZED BOLTS IN VERTICAL JOINTS, KEYED INTO BASE.

AERATION TANK: THE AERATION TANK SHALL BE OF SUFFICIENT CAPACITY TO PROVIDE A 24 HOUR PERIOD OF RETENTION AND A MINIMUM VOLUME OF 80 CUBIC FEET PER POUND OF B.O.D. THE BOTTOM OF THE TANK SHALL BE FILLETED AROUND THE PERIMETER OF THE WALLS TO PREVENT SLUDGE ACCUMULATION.

AERATION EQUIPMENT: SHALL CONSIST OF MODEL B-100 YEO-WAVE SURFACE AERATOR AS MANUFACTURED BY YEOMANS BROTHERS COMPANY, THE SURFACE AERATOR SHALL BE OF THE VERTICAL UPDRAFT TYPE, AND SHALL HAVE SUFFICIENT AERATION CAPACITY TO TURN OVER THE ENTIRE CONTENTS OF THE TANK AT LEAST FOUR TIMES PER HOUR. THE AERATOR SHALL CONSIST OF AN UPDRAFT TUBE, MANIFOLD AND AIR LINE, DEFLECTOR AND ALL NECESSARY APPURTENANCES. THE UPDRAFT TUBE SHALL BE SUPPORTED BY VERTICAL LEGS, RESTING ON THE TANK FLOOR AND ANCHORED WITH ADJUSTABLE GUY RODS AND TURNBUCLES. THE DEFLECTOR SHALL BE CENTERED OVER THE UPDRAFT TUBE, AT A LEVEL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS, TO INSURE MAXIMUM AERATION. IT SHALL BE SUSPENDED FROM A BRIDGE ACROSS THE AERATION TANK.

BLOWER, MOTOR DRIVE AND CONTROLS: UNIT SHALL CONSIST OF ROTARY POSITIVE BLOWER, POWERED BY A 3 H.P., 1750 R.P.M., 110-220 VOLT, SINGLE PHASE, 60 CYCLE 40° C RISE MOTOR, WITH V-BELT DRIVE, MAGNETIC STARTER IN NEMA 1 ENCLOSURE. AIR SUPPLY FOR THE PUMPING ACTION OF THE YEO-WAVE SURFACE AERATOR, THE AIR-LIFT SLUDGE PUMP, AND THE AIR-LIFT SKIMMING DEVICE, WILL BE SUPPLIED FROM THIS BLOWER. THE BLOWER UNIT, WITH STARTER SHALL BE MOUNTED ON TANK ABOVE GROUND LEVEL, AND EQUIPPED WITH WEATHER TIGHT COVER.

FINAL SETTLING TANK: THE FINAL SETTLING TANK SHALL BE OF AMPLE SIZE TO PROVIDE FOUR HOURS RETENTION, BASED UPON THE SAME FLOW RATES GOVERNING THE AERATION TANK. IT SHALL BE EQUIPPED WITH A YEOMANS CENTER WELL, TO FACILITATE SEPARATION OF THE SOLIDS FROM THE LIQUID. THE SETTLED SOLIDS TO BE RETURNED TO THE AERATION TANK BY AN AIR-LIFT SLUDGE PUMP. AIR FOR THE AIR-LIFT SLUDGE PUMP WILL BE SUPPLIED BY THE BLOWER, CONTROLLED BY A NEEDLE VALVE. THE YEOMANS CENTER WELL AND AIR-LIFT SLUDGE PUMP SHALL BE SUSPENDED FROM A BRIDGE ACROSS THE FINAL SETTLING CHAMBER.

SKIMMING DEVICE: THE FINAL SETTLING TANK SHALL BE EQUIPPED WITH A MANUALLY CONTROLLED AIR-LIFT SKIMMING DEVICE TO RETURN SOLIDS TO AERATION TANK. THE AIR SUPPLY IS FROM THE BLOWER THROUGH A MANUALLY OPERATED VALVE.

FROTH CONTROL: A FROTH CONTROL PUMP OF 20 GPM CAPACITY SHALL BE PROVIDED IN CLARIFIER AND SUFFICIENT SPRAYS ATTACHED TO THE DISCHARGE SIDE OF THE PUMP TO INSURE CONTROL OF FROTHING OR FOAMING IN THE AERATION CHAMBERS. THE SPRAY NOZZLE SHALL HAVE MINIMUM OPENING OF ¼" TO PREVENT CLOGGING AND SHALL PRODUCE A SHARP SPRAY PATTERN ALONG ENTIRE LENGTH OF AERATION TANK. A HOSE BID SHALL BE FURNISHED BETWEEN THE DISCHARGE SIDE OF PUMP AND SPRAY NOZZLES SHUT OFF VALVE TO PROVIDE WASH UP WATER IF REQUIRED.

TANK COVER GRATING: EXPANDED METAL GRATING PANELS SHALL BE PROVIDED FOR ALL TANK OPENINGS. THESE PANELS SHALL CONSIST OF 3/4" X NUMBER 9 EXPANDED METAL GRATING (NOT FLATENED), WELDED TO 1½" X 1½" X 3/16" ANGLE IRON FRAMES. THE UNIT SHALL BE HOT DIP GALVANIZED AFTER MILL SCALE AND GREASE IS REMOVED.

FIELD SERVICE: A FACTORY TRAINED REPRESENTATIVE SHALL BE PROVIDED TO START THE PLANT, INSTRUCT THE OPERATOR, AND MAKE PERIODIC INSPECTIONS FOR A PERIOD OF ONE YEAR.

JUN 14 1965
7-7-62

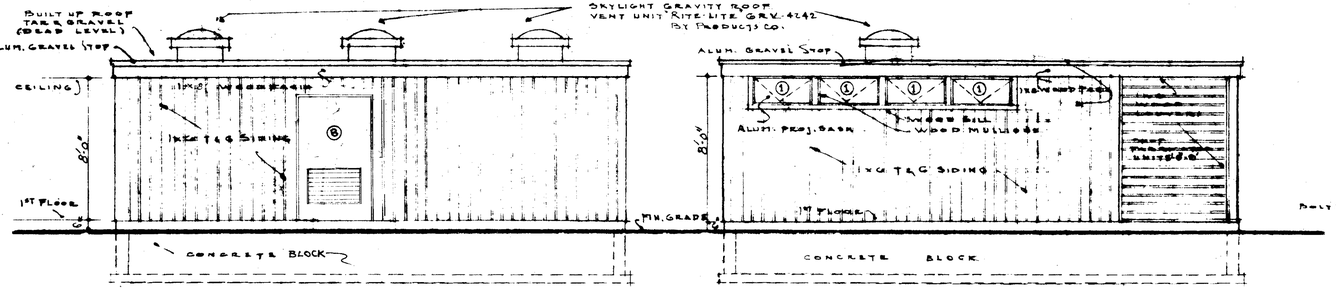
SEWAGE TREATMENT PLANT

NOTE: ALL LUMBER, SIDING, ETC. TO BE PRESSURE-TREATED - SEE SPECS.

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

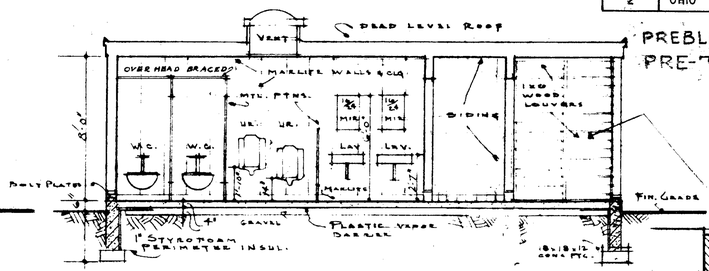
55/62

PREBLE COUNTY
PRE-70 2.47

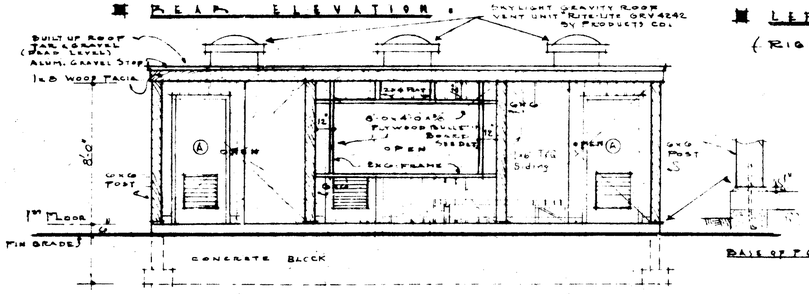


■ REAR ELEVATION ■ ■ LEFT SIDE ELEVATION ■ SCALE 1/4" = 1'-0"

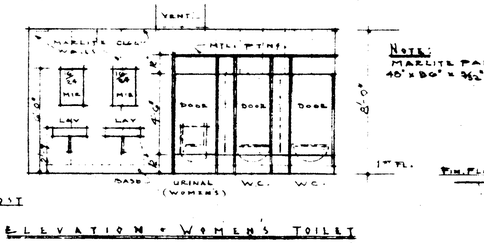
(RIGHT SIDE ELEVATION SAME OPPOSITE HAND)



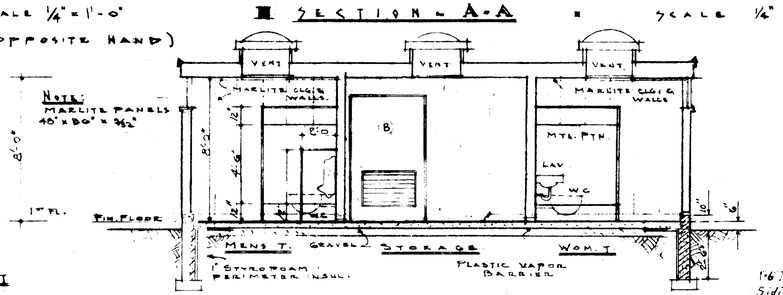
■ SECTION A-A ■ SCALE 1/4" = 1'-0"



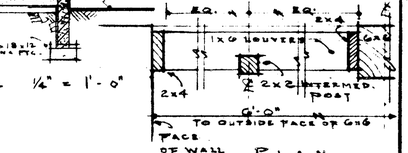
■ FRONT ELEVATION ■ SCALE 1/4" = 1'-0"



ELEVATION - WOMEN'S TOILET

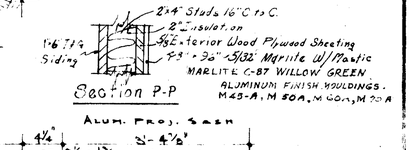


■ SECTION - B-B ■ SCALE 1/4" = 1'-0"

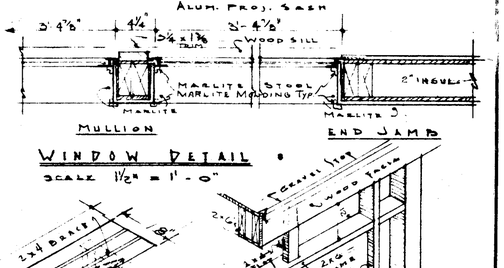


PLAN

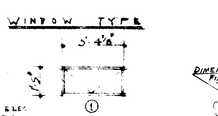
SEE DETAILS OF LOUVERS
SCALE 1½" = 1'-0"
(~~3 INCH~~ FABRICATED UNIT)
5'-6" x 8'-0" (AUXILIARY SHEET.)



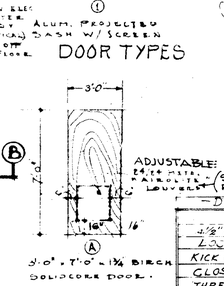
Section P-P

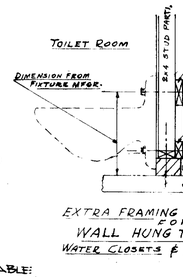


WINDOW DETAIL ■ SCALE 1½" = 1'-0"

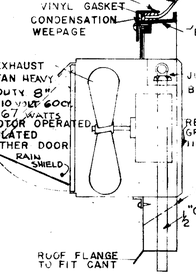


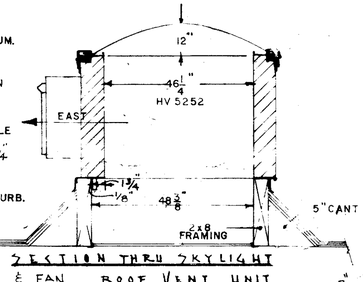
DOOR TYPES





EXTRA FRAMING MEMBERS REQD. FOR WALL HUNG TOILET FIXTURES
WATER CLOSETS & URINALS.





■ SECTION THRU SKYLIGHT & FAN ROOF VENT UNIT
SCALE 1" = 1'-0"

SEE BULLETIN BOARD DETAIL ■ AUXILIARY SHEET

DOORS	A	B	C	All
3½" BUTTS 1½ PR. STSDBB81	×		×	×
LOCK 77-62 AN				×
KICK PLATE 12" 16GA 34" US 28	×			×
CLOSER 44 V EN	×			×
THRESHOLD # 60 36x4 US 10	×			×
PUSH PLATE 8 B 3 AN	×			×
DOOR PULL 189C MA AN	×			×
LOCK 77-04 GA-AN AN		×	×	
KICK PLATE 16GA 46X12 US 28		×		
THRESHOLD # 80 4 PX 4 4 US 10		×		
CLOSER 44V W 90° HLOOPEN EN			×	
6"x5" BUTTS 1½ PR STSDBB180		×		
KICK PLATE 16GA. 30X12 US 28			×	
THRESHOLD # 60 32X5 US 10			×	
NUMBER REQUIRED	2	1	1	2

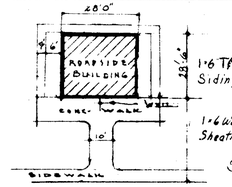
DOOR HARDWARE - SCHEDULE -

THE ABOVE ARE USED AS STANDARDS; EQUAL PRODUCTS ARE ACCEPTABLE. BUTTS - STANLEY, LOCKS - SARGENT, CLOSERS - SARGENT, PLATES AND PULLS - SARGENTS THRESHOLD - ZERO.

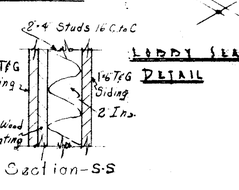
INTERIOR FINISH ■

ROOM	FLOOR	WALLS	CEILING
LOBBY	CONCRETE	WOOD SIDING	WOOD SIDING
STORAGE	CONCRETE	" "	" "
MEN'S T.	*	MARLITE	MARLITE
WOM. T.	*	MARLITE	MARLITE

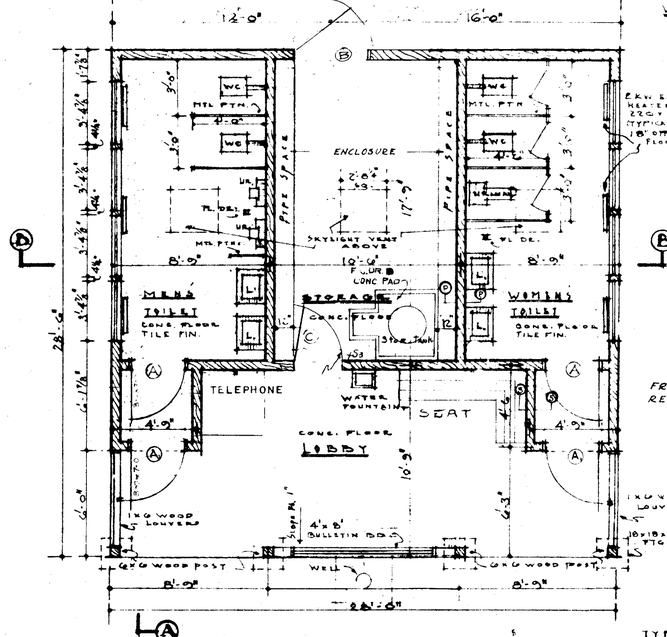
* UNGLAZED CERAMIC MOSAIC TILE FLOOR, 1"x1"



SITE PLAN
SCALE 1" = 30'-0"



LOBBY SEAT DETAIL



■ PLAN ■ SCALE - 1/4" = 1'-0"

BUREAU OF LOCATION AND DESIGN
OHIO DEPARTMENT OF HIGHWAYS.

ROADSIDE TOILET AND STORAGE UNIT

DATE 5-24-'62 7-17-62

STANDARD CONSTRUCTION DRAWING

APPROVED ENGR. OF B

JUN 14 1962

TOILET & STORAGE UNIT

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

56/62

FREBLE COUNTY
PRE-70-2.47

SHEATHING AND GRAVEL STOP OMITTED
FASCIA
HEADER
BOXING
2X6 BLOCK JOIST
DOTTED LINE SHOWS POSITION OF 6X6 POST.
SHOWING ROUGH FRAMING
PLAN VIEW

ISOMETRIC VIEW
SIDING
HEADER
HALF OF HEADER THICKNESS IS OUTSIDE OF THE STUD
JOISTS
CARRY THIS STUD UP TO TOP OF 2X6
STUD LINE BELOW
SIDING
SHEATHING
2 X 6
2 X 6
HEADER
16" REGULAR O.C.
GIRDER BEAM OF 3-2X6
PLAN VIEW

2X4 SPACER
NAILER
BLOCKING
HEADER
WALL
DOUBLE PLATE
NO SCALE

CANT
SHEATHING
2 X 4 SLATS at 24" O.C.
4" INSULATION
2X6
JOIST HANGER
CEILING OF WOOD SIDING
CORNER POSTS
6X6
POST Nº 1
60° WOOD LOUVERS
2X2 CENTER MULLION

PLAN VIEW - ROOF FRAMING OF SECTION BELOW
2X4 SLATS FOR VENTILATION
4" INSULATION
ROOF JOIST
LOBBY
VESTIBULE TO TOILET ROOMS
2X4 SLATS at 24" O.C.
ROOF JOISTS
HEADER
STUD
MENS TOILET ROOM
DOOR HEAD

SIDING
THIS NAILER MAY REST ON PARTITION & END HERE
Vestibule Floor.
LOUVER FRAME
PLAN VIEW OF FRAMING SHOWING TERMINATION OF NAILER JOIST.

GRAVEL
CANT
SHEATHING
OPEN
HEADER
ROOF JOISTS
4" INSULATION
FASCIA
VERTICAL SIDING
ALUMINUM PROJECTED WINDOW SASH
SHEATHING
2X4 STUD FRAMING AT 16" O.C.
SILL
TOILET ROOM
OPEN
2" INSULATION
PARTITION
PARTITION MEETS REAR WALL
Partition
PLAN SECTION
MAKE 2X4 CURB TO FIT SKY LIGHT
VENTILATING SKY LIGHT
CANT
2X6
OPENING AT ROOF VENTS BLOCKING
OPENING TO FIT GRILLE.
DOUBLE PLATE FOR BEARING WALLS & PARTITION.
STORAGE ROOM

SECTION - B
SIDE WALLS
PARTITION

C
SHEATHING
AIR SPACE
SHEATHING CARRIED ON 2X4 SLATS TO PERMIT AIR CIRCULATION IN JOIST SPACE
2'-0" O.C.
ROOFING
WOOD SIDING
2X4
2X4
2X4
REAR DOOR
C

SECTION A
REAR WALL

SECTION C

SECTION - D

SECTION - D

2 X 2 MULLION
INSIDE
18 - 1X6 SLATS in 6-3/4" Spaces
8'-0"
2X4 FRAME
OPEN
DETAIL OF LOUVERS - SECTION - F
Use 2X4 Frame with a 2X2 MULLION in center. Louvers will be 1X6 set at 60° as shown.

28'-0"
10'-0"
8'-2"
8'-2"
8"
8"
4" BLOCKS
1 ROW 6" BLOCK ON 8" BLOCK WALL
16'-10"
CONC. 1½" BELOW FIN. FLOOR
FIN. FLOOR LEVEL
CONC. 1½" BELOW FIN. FLOOR
28'-6"
4'-0"
4'-4"
8"
4"
8'-5"
10'-6"
3'-4"
8'-5"
SLOPE DOWN 1" FROM FIN. FL.
POST ANCHORS
8" CONC. BLOCK ON 16" WIDE FOOTER
FOUNDATION PLAN
SCALE 1/4" = 1'-0"

DOOR FRAME IF MATCHING EDGE OCURS HERE MAKE SQUARE
SHEATHING
SIDING
PLAN
½" ANCHOR BOLTS SPC. 8' MAX.
2X4
DOOR
VERTICAL SIDING
2X4 PL.
DOOR FRAME
FL. LINE
8" CONC. BLOCK
DOOR WIDTH + 6
3"
SIDING AS TRIM AT OPENINGS
MASONRY DETAIL AT DOORS SIDING REMOVED
COMBINED DOORWAY DETAILS

BLOCKING
CEILING
1'-3"
2'-5½"
4'-0"
OPEN
12"
OPEN
2X6
2X4 FLAT
5'-7"
OPEN
2X6
BULLETIN BOARD
EXTERIOR PLYWOOD
PLYWOOD
2X6 FRAME
6X6
6 x 6
OPEN
2X6
2X2
POST Nº 2
ELEVATION OF ROUGH FRAMING
SECTION - G
DETAIL OF FRAMING AROUND BULLETIN BOARD

ELECTRIC HEATER
2" INSULATION
TOILET ROOM
2x4
SERVICE ROOM
4" CONC. BLOCK
FIN. FL.
TILE
FIN. FL.
6" CONC. BLOCK
½" RIDGED INSULAT.
1" STYROFOAM INSULATION
PLASTIC FILM MOISTURE BARRIER
2'-8" 4 BLOCKS
2X4 APRON
4"
CONC. FOOTING 16" X 8" DEEP
SECTION - B

A
7 - 2x6 JOIST @16" O.C.
8 - 2x6 JOIST @16" O.C. AND 1 - 2x6 14"
7 - 2x6 DO.
B
B
21 - 2x6 JOIST @16" O.C.
BULLETIN BOARD
JOIST HANGERS
3 - 2x6 BEAM
3 - 2x6 BEAM LET BULLETIN BOARD 2x4 FLATS 3" INTO MIDDLE 2x6 OF BEAM
KEY PLAN
FRAMING PLAN
1/8" = 1'-0"

BUREAU OF LOCATION & DESIGN
OHIO DEPARTMENT OF HIGHWAYS

ROADSIDE TOILET & STORAGE UNIT

5-24-62
6-11-62
7-16-62

AUXILIARY
CONSTRUCTION DRAWING

APPROVED _____ ENGINEER L&D

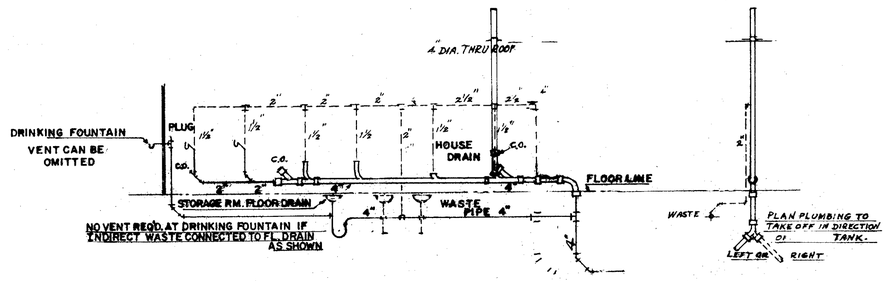
JUN 14 1962

TOILET & STORAGE UNIT

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

57
62

PREBLE COUNTY
PRE-70-2.47

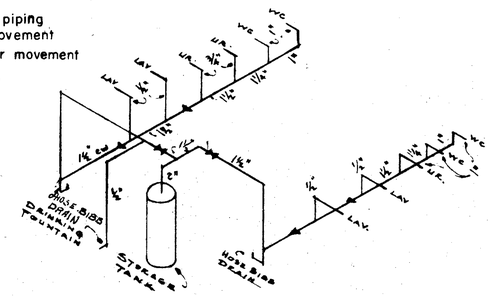


ELEVATION OF PLUMBING STACK
TWO REQUIRED

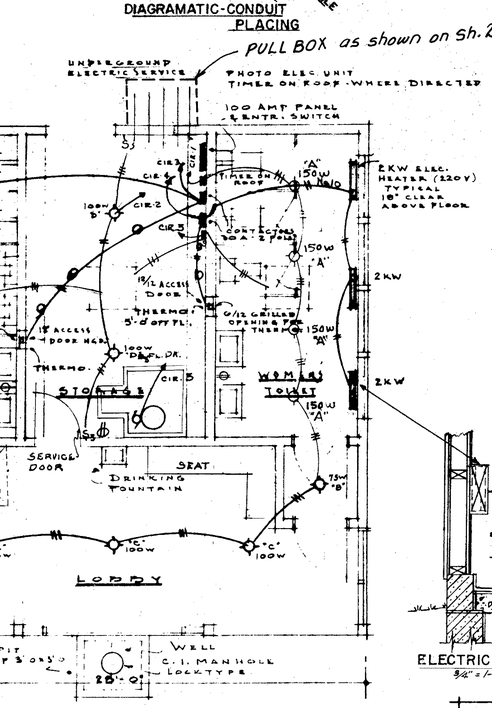
END VIEW-ONE STACK

ALL DRAINAGE AND PLUMBING PIPE SHALL BE RIGIDLY SECURED OR SURPORTED TO KEEP THEIR ALIGNMENT AND ALL CHANGES OF DIRECTION EITHER VERTICAL OR HORIZONTAL SHALL BE MADE WITH THE APPROPRIATE USE OF 45° FITTINGS, BENDS, ETC.

NOTE: Locate piping to enable free movement of Service door movement by the Engineer.



COLD WATER PIPING DIAGRAM
NO SCALE

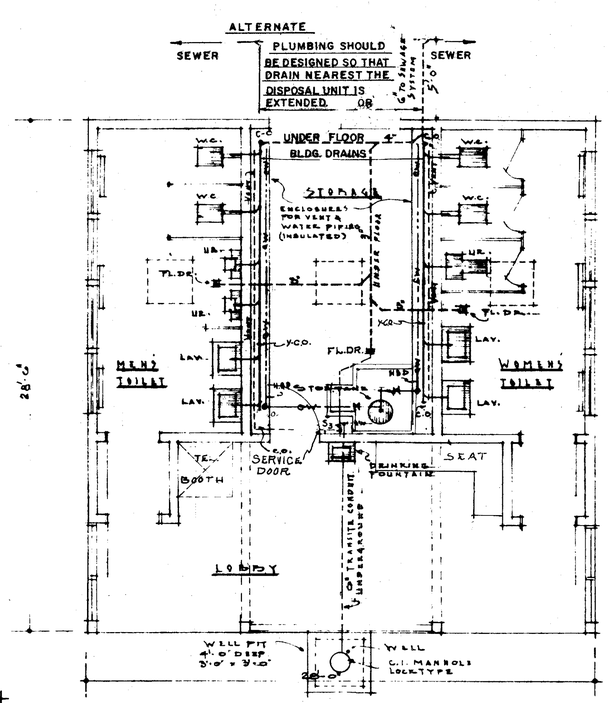


DIAGRAMATIC-CONDUIT PLACING

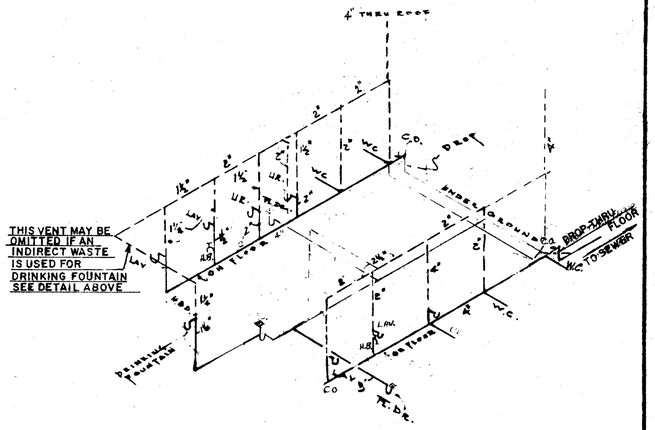
HEATING & ELECTRIC PLAN

SCALE—1/4" = 1'-0"

ALTERNATE
PLUMBING SHOULD BE DESIGNED SO THAT DRAIN NEAREST THE DISPOSAL UNIT IS EXTENDED. OR



PLUMBING PLAN



PLUMBING DIAGRAM
NO SCALE— SEE ELEVATION OF PLUMBING ABOVE

BUREAU OF LOCATION AND DESIGN
OHIO DEPARTMENT OF HIGHWAYS

ROADSIDE TOILET AND STORAGE UNIT

DATE
5-24-62
7-17-62

STANDARD CONSTRUCTION DRAWING

APPROVED _____ ENGR. L & D

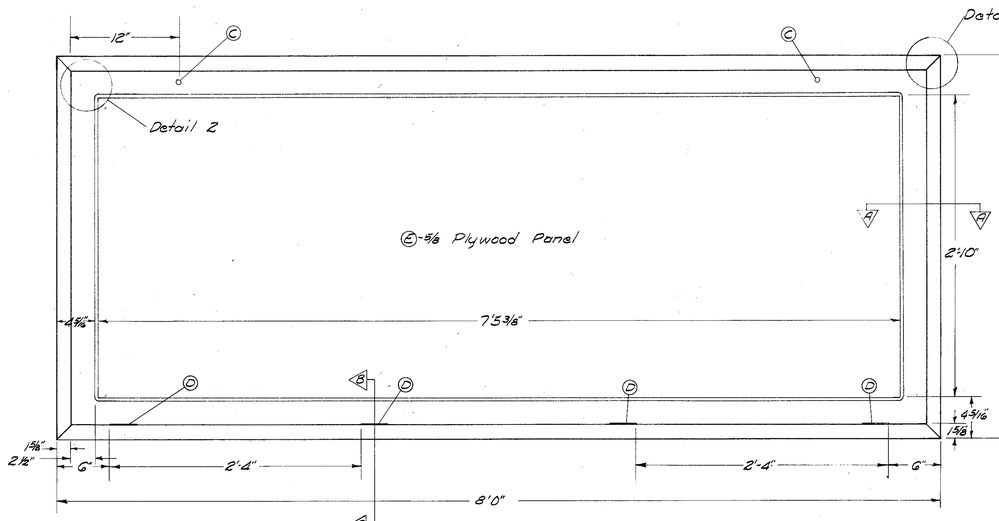
JUN 14 1965

TOILET & STORAGE UNIT

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

57A
62

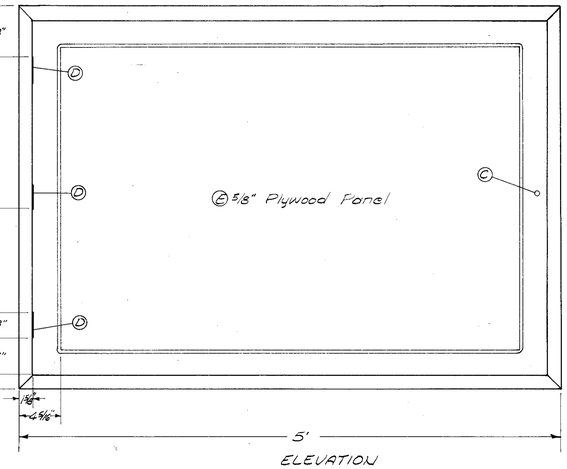
Preble County
PRE-70-2.47



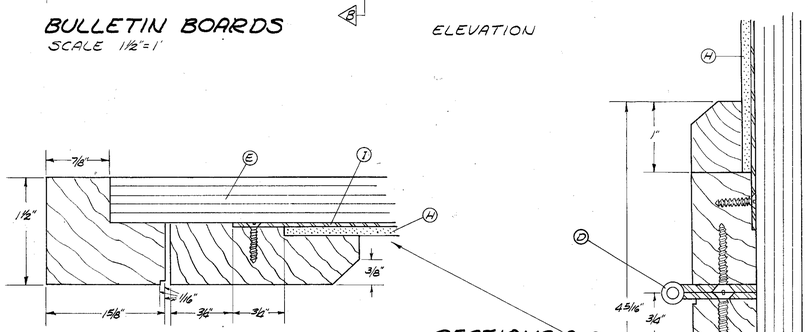
ELEVATION

BULLETIN BOARDS

SCALE 1½"=1'

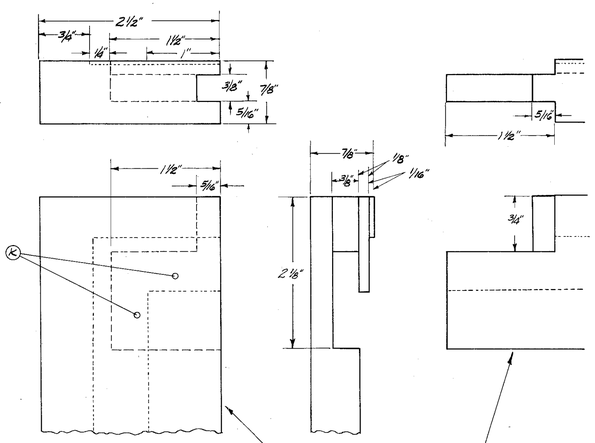


ELEVATION



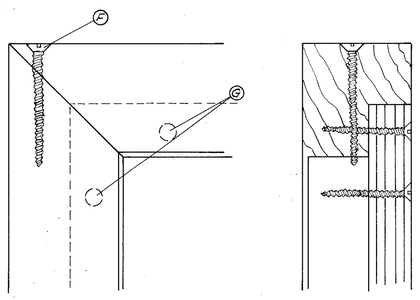
SECTIONS A-A AND B-B

SCALE 1"=1"



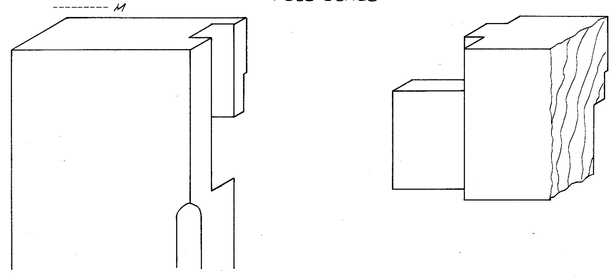
DETAIL 2 MORTISE AND TENON

FULL SCALE



DETAIL 1

SCALE 1"=1"



LEGEND

AA-BB Sections

- (C) Brass locks ¾" diameter - key like
- (D) Hinges, hot galvanized 3"x2½" with tight brass pins.
- (E) Douglas Fir Plywood 5/8"-5 ply A.A.C. Exterior S.L.S.
- (F) 1 3/4" #10 Brass flat head - Each corner
- (G) 1 1/4" #8 Steel flat head - Countersunk 8" O.C.
- (H) ⅛" Plexigloss
- (I) Aluminum strip - 1½" wide 24 ga. with ½" #6 flat head aluminum or cadmium plated screws counter sunk flush 6" O.C.
- (K) Steel dowels
- (L) Indicates rabetted area of joint
- (M) Indicates rabetted area for plexiglass and aluminum strip

Bulletin board to be constructed of F.A.S. grade red or white oak, thoroughly dry.

Rev. 9-20-60
(revised to plans)

ROADSIDE IMPROVEMENT
OHIO DEPARTMENT OF HIGHWAYS

BULLETIN BOARD

DATE

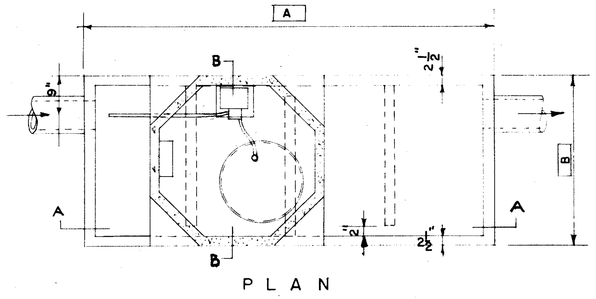
CONSTRUCTION DRAWING

TRACED: REF APPROVED: JTH

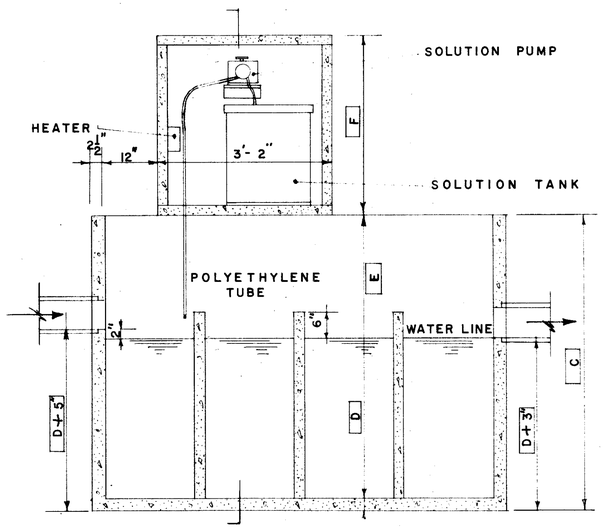
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

58
62

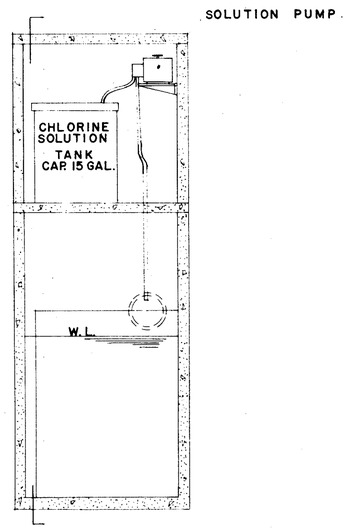
PREBLE COUNTY
PRE-70 2.47



PLAN



SECTION
A-A



SECTION
B-B

PRECAST CHLORINE CONTACT TANK

DESIGN DATA

30 MINUTE RETENTION BASED ON 24 HOUR AVERAGE FLOW

PLANT DESIGN FLOW (G.P.D.) 24HR AVG.	CONTACT TANK VOL. GALLONS	DIMENSIONS								
		A	B	C	D	E	F	G	H	J
5000	104	7'-6"	3'-2"	5'-6"	9"	4'-6"	2'-0"			
6000	125	7'-6"	3'-2"	5'-6"	11"	4'-4"	2'-0"			
7000	146	7'-6"	3'-2"	5'-6"	13"	4'-2"	2'-0"			
7500	156	7'-6"	3'-2"	5'-6"	14"	4'-1"	2'-0"			
8000	167	7'-6"	3'-2"	5'-6"	15"	4'-0"	2'-0"			
9000	188	7'-6"	3'-2"	5'-6"	17"	3'-10"	2'-0"			
10000	208	7'-6"	3'-2"	5'-6"	19"	3'-8"	2'-0"			

CHLORINATION

FURNISH ONE POST CHLORINATOR, CONSISTING OF PRECAST CONCRETE CONTACT CHAMBER, CHLORINE SOLUTION PUMP, CHLORINE SOLUTION TANK AND PRECAST CONCRETE EQUIPMENT HOUSING.

CONCRETE CONTACT CHAMBER: PRECAST CONCRETE CONTACT CHAMBER SHALL BE SIZED TO GIVE THIRTY MINUTE RETENTION OF DAILY FLOW FROM SEWAGE PLANT. IT SHALL BE PROPERLY BAFFLED TO INSURE THOROUGH MIXING OF SEWAGE PLANT EFFLUENT AND CHLORINE.

SOLUTION PUMP: FURNISH AND INSTALL ONE BRUNER MODEL #20 (OR EQUAL) POSITIVE DISPLACEMENT CHLORINE SOLUTION PUMP. PUMP TO HAVE A CAPACITY OF 2.4 TO 24 GALLONS PER DAY.

SOLUTION TANK: FURNISH ONE 15 GALLON POLYETHYLENE SOLUTION TANK WITH LID.

HOUSING: FURNISH ONE PRECAST CONCRETE HOUSING FOR SOLUTION PUMP AND SOLUTION TANK. HOUSING TO BE EQUIPPED WITH STRIP HEATER OR HEAT LAMP TO PREVENT FREEZING DURING EXTREME LOW TEMPERATURES.

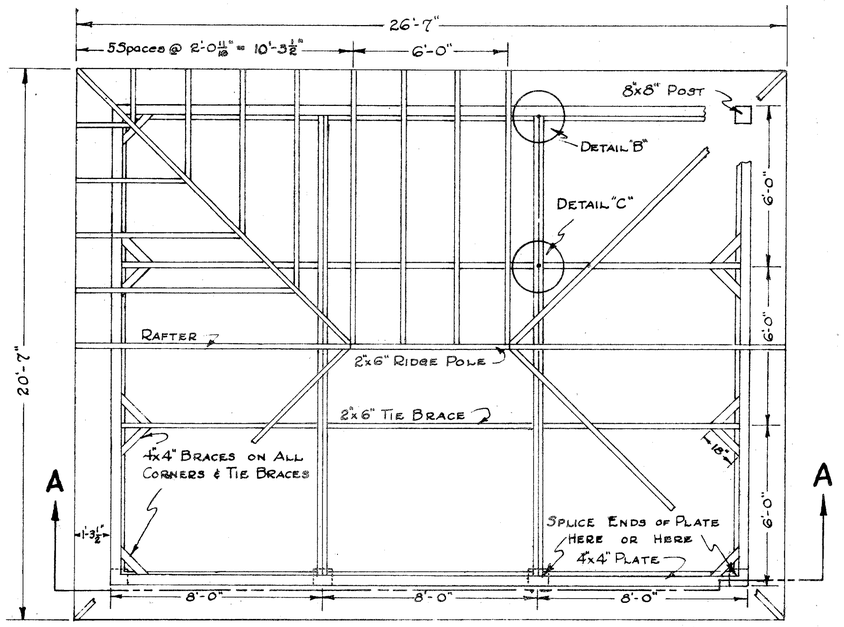
JUN 14 1965
7-17-62

CHLORINATION TANK

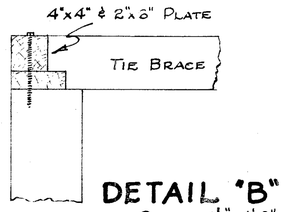
HD. DIVISION	STATE	PROJECT	TYPE FUNDS
	OHIO		

58 A
62

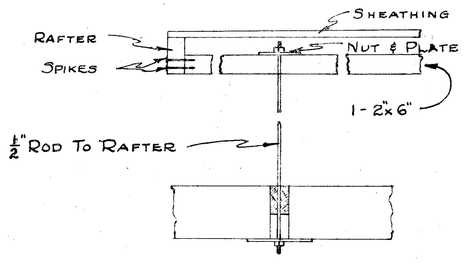
PREBLE COUNTY
PRE-70-2.47



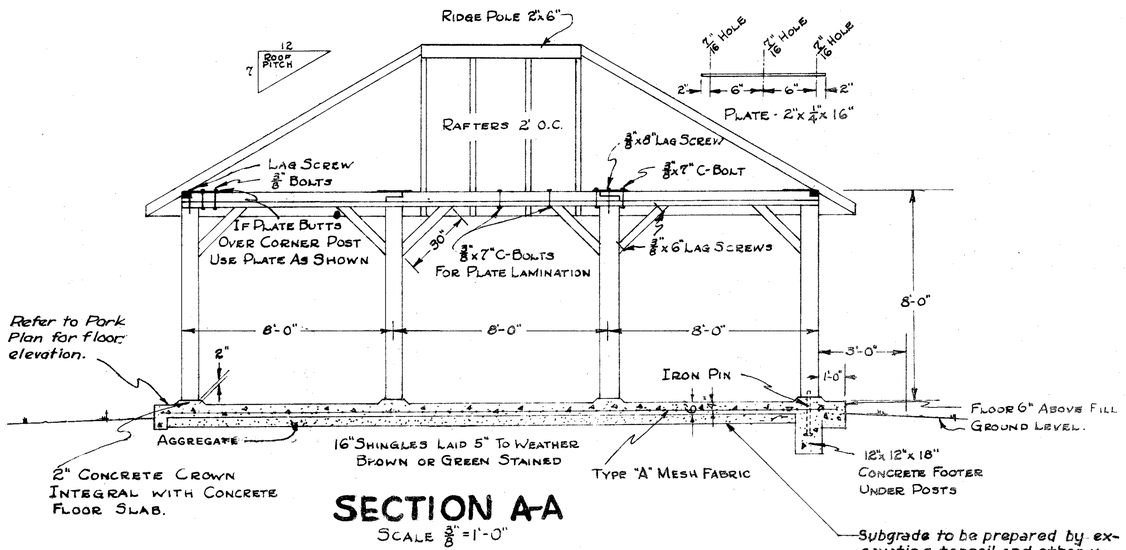
ROOF AND RAFTER PLAN
SCALE 3/8" = 1'-0"



DETAIL "B"
SCALE 1 1/2" = 1'-0"



DETAIL "C"
SCALE 1 1/2" = 1'-0"



SECTION A-A
SCALE 3/8" = 1'-0"

Subgrade to be prepared by excavating topsoil and other unsuitable soil and then refilling (if necessary) and compacting to subgrade elevation. Cost for this work included in unit price for Item Special Shelter House.

NOTES

All lumber shall be S4S, Std., K.D., #1 common and better, Southern Yellow Pine or Douglas Fir. (Sec. M-8).

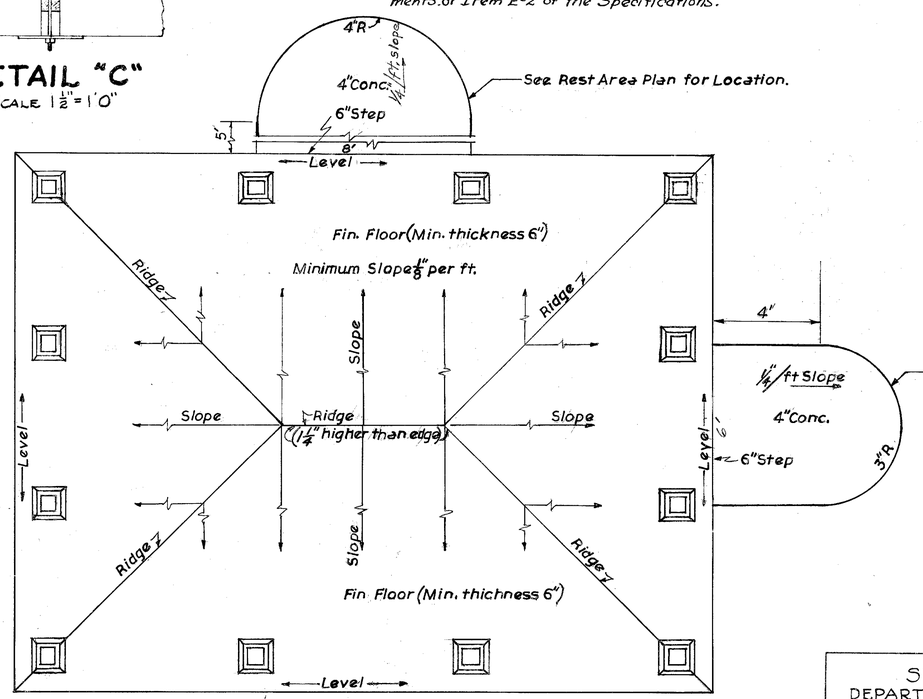
All lumber and shingles shall be treated in accordance with the requirements for "Pentachlorophenol Treatment," Sec M-8.6.

Large sized washers shall be used with all bolts, one at each end; a lock washer shall also be used at the nut end. Bolts shall be cut off 1/4" beyond the nut end and then hammered. All bolt holes shall be painted with pentachlorophenol 5% (by weight) solution. Bolts shall be good quality wrought iron, cadmium plated.

Aluminum or Hot Galvanized nails, 1 1/4" long shall be used to nail down shingles.

Aggregate subbase for concrete slab shall meet the requirements of Item I-22 Subbase, Grading "C" or "D".

The necessary excavation shall be performed in accordance with the requirements of Item E-2 of the Specifications.



FLOOR FINISHING PLAN

JUN 14 1965

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
DETAIL OF SHELTER HOUSE
ROADSIDE PARKS
JANUARY 16, 1956

DESIGNED	TRACED	APPROVED

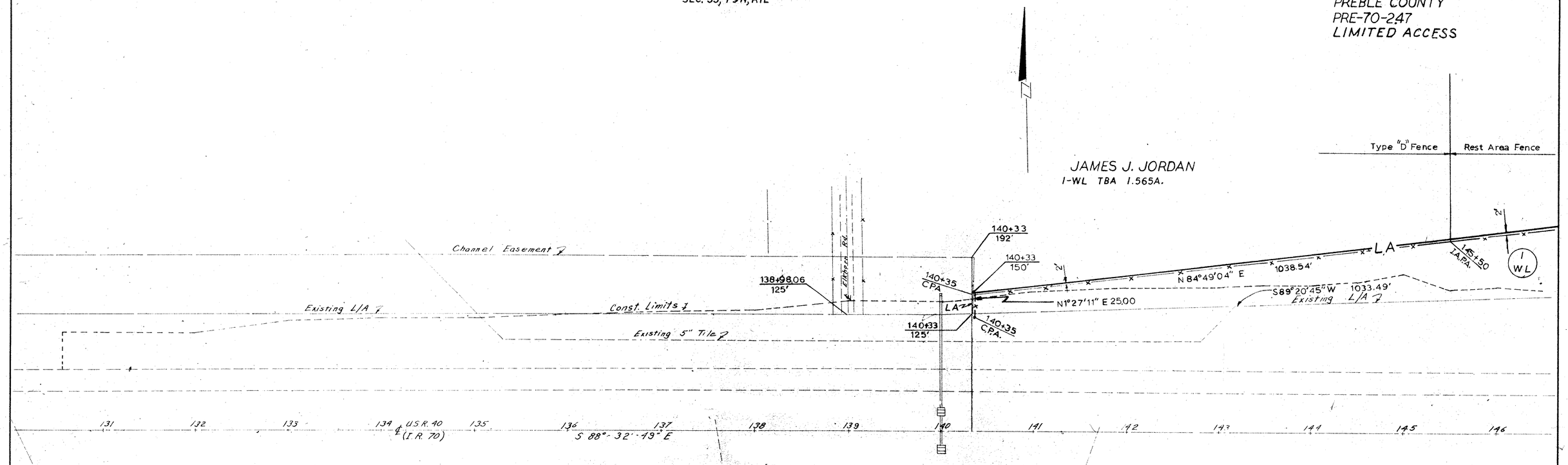
(311)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

53/62

PREBLE COUNTY
PRE-70-247
LIMITED ACCESS

PREBLE COUNTY
JEFFERSON TOWNSH.,
SEC. 33, T9N, R1E



R/W SUMMARY

PARCEL NO.	OWNER	DEED RECORD BOOK	DEED RECORD PAGE	RECORD AREA	TO BE ACQUIRED LAND	TO BE ACQUIRED BLDGS.	SHEET NO.	REMARKS
1-WL	James J. Jordan	226	309		1.565A.	No	1 & 3	
2-WL	James J. Jordan	226	309		2.768A.	No	1 & 2	
3-WL	Marie Loudenback	227	540		7.983 A	NO	3 & 4	
4-WL	Jose Murray & Elizabeth M Price	166	261		5.678 A	NO	2 & 4	

PREBLE COUNTY
JACKSON TOWNSHIP
SEC. 4, T8N, R1E.

JUN 14 1965

DATE	REVISION	NAME
10-22-64	Rev. Eliminate Parcel 2-WA	WLP

PREBLE COUNTY PRE-70-247 R/W. PLAN STA. 131+00 TO STA. 146+00 (1)

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

60
62

PREBLE COUNTY
PRE-70-247
LIMITED ACCESS

PREBLE COUNTY
JEFFERSON TOWNSHIP
SEC. 33, T9N, R1E

PREBLE COUNTY
JEFFERSON TOWNSHIP
SEC. 34, T9N, R1E.

Existing L/A

N 0°48'24" E

150+65.79
163'

150+67.63 ℄
90°38'47"

U.S.R. 40 (I.R. 70)

146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161

S 88°-32'-49"E

6" Tile

Existing L/A S 88°20'42"E 919.50'

S88°59'12"E 79.78

Existing L/A S 88°47'03"E 1299.94'

150+69.49
156.68

Stone Found marked +

151+49.31
156.10

Stone Found marked T

NOTE: These monuments shall be protected by the contractor as per section 6-709 until they can be witnessed, reference and later new monuments reset by the contractors forces.

2 WL

4 WL

145+50 1APA

LA N60°02'52"W 788.66

149+32 CPA

149+80
270'

Type "D" Fence Rest Area Fence

LA

N 1°27'11" E 230.00'

149+98 CPA

149+30
500'

JAMES J. JORDON
2 WL TBA 2.768 A.

S 0°38'14" W
N 0°38'14" E

34393
34393

Const. Limits

2'

153+15 1APA

N 88°32'49" W 224.21'

N 88°32'49"W 545.79'

LA

51+54.21
500'

156+98 CPA

S 84°36'07" W 1007.19'

157+00
270'

2'

LA

S 1°27'11" W 230.00

157+00
500'

JOSE MURRAY
ELIZABETH M. PRICE
4 WL TBA 5.678 A.

770 x 2.00

PREBLE COUNTY
JACKSON TOWNSHIP
SEC. 4, T8N, R1E.

PREBLE COUNTY
JACKSON TOWNSHIP
SEC. 3, T8N, R1E

JUN 14 1965

DATE	REVISION	NAME
10-13-64	Rev. Added Parcels 2-WA2 & WA3.	WLP
10-22-64	Rev. Eliminate Parcels 2-WA1, WA2 & WA3	WLP

PREBLE COUNTY PRE-70-247 R/W. PLAN STA. 146+00 TO STA. 161+00 (RT.) 2

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

61
62

PREBLE COUNTY
PRE-70-247
LIMITED ACCESS

PREBLE COUNTY
JEFFERSON TOWNSHIP
SEC. 33, T9N, R1E.

PREBLE COUNTY
JEFFERSON TOWNSHIP
SEC. 34, T9N, R1E.

JAMES J. JORDAN
1 WL TBA 1.565A.

MARIE LOUDENBACK
3 WL TBA 7.983A.

℄

150+61.31
560'

150+63.2
C.P.A.

N 88° 21' 20" E

154+30
1 APA.

739.77'

2'

LA

158+00
600'

157+98
C.P.A.

2'

LA

39.703'

N 0° 48' 24" E

S 1° 27' 11" W 330.00'

3
WL

construction limits

150+64.58
270'

150+66.6
C.P.A.

158+00
270'

157+98
C.P.A.

2'

LA

N 84° 49' 04" E 1038.54'

145+50
1 APA.

1
WL

S 0° 48' 24" W 107.01'

LA

S 80° 42' 53" E 660.45'

2'

150+65.79
163'

158+00
163'

Existing L/A ℄ S 89° 20' 45" W 1033.49'

N 88° 32' 49" W 1388.24'

Existing L/A ℄

6" Tile

150+67.63
℄

90° 38' 47"

146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161

℄ U.S.R. 40
(I.R. 70)

S 88° 32' 49" E

NOTE: These monuments shall be protected by the contractor as per section G-7.09 until they can be witnessed, reference and later new monuments reset by the contractors forces.

Existing L/A

Existing L/A

150+69.40
156.78'

Stone Found
marked +

151+49.18
156.17'

Stone Found
marked T

PREBLE COUNTY
JACKSON TOWNSHIP
SEC. 4, T8N, R1E

PREBLE COUNTY
JACKSON TOWNSHIP
SEC. 3, T8N, R1E

JUN 14 1965

DATE	REVISION	NAME
10-22-64	Rev. Eliminate Parcel 1-WA.	W.L.P.

PREBLE COUNTY PRE-70-247 R/W PLAN STA. 146+00 TO STA. 161+00 (L.T.) 3

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

62
62

PREBLE COUNTY
PRE-70-2.47
LIMITED ACCESS

PREBLE COUTY
JEFFERSON TOWNSHIP
SEC. 34, T9N, R1E

Rest Area Fence

Type "D" Fence

MARIE LOUDENBACK
3 WL TBA 7.983 A.

RUTH W. MCKINSEY
Not Reqd.

N 2°19'40"E

161+30
LAPA

S 80° 42' 53"E
660.45

3
WL

2'

164+54.29
180'
CPA

164+52.3

LA

164+54.03
163'

S 2°19'40"W 17.01

164+53.51
129'

164+51.5
CPA

Exist L/A

Channel Easement

Exist L/A

Const. Limits

Exist L/A

164+51.54
℄

89°07'31"

P.I. Sta. 167+21.57
Δ = 0°-10'-00" Lt.

161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177

S 88°-32'-49"E

℄ U.S.R. 40
℄ (I.R. 70)

S 88°-42'-49"E

164+49.24
150.72

S 88°44'42"E 250.76

166+99
LAPA

Section Line

Const. Limits

Exist. L/A

Exist. L/A

4
WL

2'

162+00
LAPA

S 84°36'07"W 1007.19

LA

167+00
149.85

JOSIE MURRAY
ELIZABETH M. PRICE
4 WL TBA 5.678 A.

Rest Area Fence

Type "D" Fence

PREBLE COUNTY
JACKSON TOWNSHIP
SEC. 3, T8N, R1E.

JUN 14 1965

DATE	REVISION	NAME

PREBLE COUNTY PRE-70-247 R/W. PLAN STA. 161+00 TO STA. 177+00 (4)