

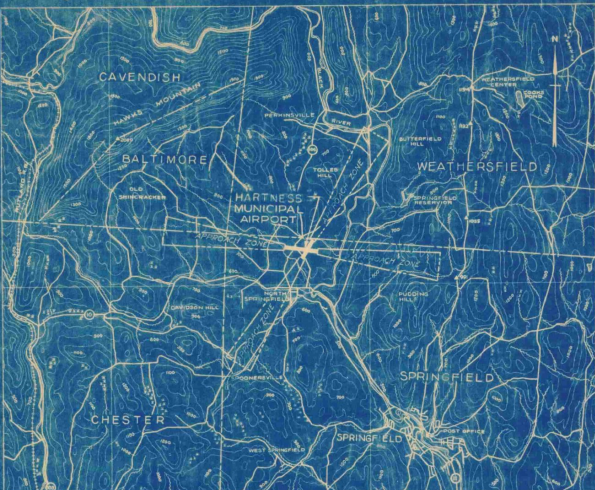
TOWN OF SPRINGFIELD VERMONT

INDEX TO CONTRACT DRAWINGS

| SHEET NO | TITLE | DATE |
|----------|--|-----------------|
| 1 | TITLE SHEET AND LOCATION MAP | AUGUST 30, 1947 |
| 2 | MASTER PLAN | AUGUST 30, 1947 |
| 3 | LAYOUT PLAN | AUGUST 30, 1947 |
| 4 | CLEARING PLAN | AUGUST 30, 1947 |
| 5 | PAVING, CROSS SECTIONS, TEST PIT DATA, GRADING DISTRIBUTION AND SEEDING PLAN " | AUGUST 30, 1947 |
| 6 | SSW-NNE LANDING STRIP - PLAN AND PROFILE | AUGUST 30, 1947 |
| 7 | W-E RUNWAY-PLAN AND PROFILE | AUGUST 30, 1947 |
| 8 | GRADING AND DRAINAGE PLAN AND DETAILS | AUGUST 30, 1947 |

INFORMATION DRAWINGS (NOT PART OF THIS CONTRACT)

| | |
|--|-----------------|
| PLAN TO ACCOMPANY SPONSORS ASSURANCE AGREEMENT | AUGUST 30, 1947 |
| OBSTRUCTION PLAN | AUGUST 30, 1947 |



Traced from U.S.G.S. Maps

LOCATION MAP

LEGEND

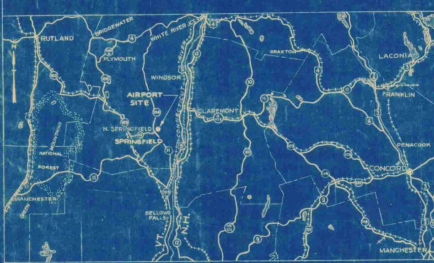
- City or Town Lines
- Approach Roads
- Improved Roads
- Railroads
- C. & G.S. Bench Mark
- Post Office
- Swamp Area
- Brook or Stream
- State Highways
- U.S. Highways

NOTES

Latitude 43° 20' 30"
Longitude 73° 31' 00"
Datum of 1929
Elevation 273.8 (highest point in usable landing area)
Ailing distance and direction from Town 3.6 Miles - SW
Distance by road to Post Office 3.6 Miles

SCALE IN MILES

Contour Interval - 100 Feet
Elevations are based on Mean Sea Level (U.S. Geological Survey)



VICINITY MAP
SCALE IN MILES

ESTIMATED QUANTITIES OF MAJOR ITEMS

| ITEM | QUANTITY | UNITS |
|--|----------|--------|
| CLEARING | 2.9 | ACRES |
| CLEARING AND GRUBBING | 2.5 | ACRES |
| TRIMMING SMALLER THAN 2.5' | 150 | UNITS |
| TRIMMING LARGER THAN 2.5' | 40 | UNITS |
| COMMON EXCAVATION | 53,300 | CU YDS |
| SOLID ROCK EXCAVATION | 100 | CU YDS |
| BORROW EXCAVATION | 500 | CU YDS |
| WATERING (1000 GAL PER UNIT) | 130 | UNITS |
| RIPRAP | 250 | SQ YDS |
| REINFORCED CONCRETE DRAIN PIPE (24") | 380 | LIN FT |
| HEADWALLS | 1 | UNIT |
| INLETS | 1 | UNIT |
| BITUMINOUS PRIME COAT | 7,700 | GALS |
| ALTERNATE A | | |
| MINERAL AGGREGATE FOR BASE COURSE | 3,515 | TONS |
| ASPHALT CEMENT FOR BASE COURSE | 61,330 | GALS |
| BITUMINOUS SEAL COAT | 3,350 | GALS |
| ALTERNATE B | | |
| MIXED IN PLACE BASE COURSE | 25,560 | SQ YDS |
| BITUMINOUS MATERIAL FOR BASE COURSE | 57,500 | GALS |
| BITUMINOUS SEAL COAT | 3,350 | GALS |
| SEAL COAT COVER AGGREGATE | 170 | TONS |
| TOPSOIL | | |
| PREPARING GROUND | 230 | ACRES |
| TOPSOIL | 9,200 | CU YDS |
| SEEDING | | |
| PREPARING GROUND | 33.0 | ACRES |
| LIMING & FERTILIZING | 33.0 | ACRES |
| SOWING | 33.0 | ACRES |
| REPAIRS - TOPSOIL | 100 | CU YDS |
| MOWING | 33.0 | ACRES |
| REFERTILIZING | 33.0 | ACRES |
| RESEEDING | 5.0 | ACRES |
| SIGN, SEGMENTED CIRCLE MARKER AND LANDING STRIP INDICATORS | LUMP | SUM |
| PREPARATION AT SITE, CLEANING UP ETC. | LUMP | SUM |
| UNDERGROUND ELECTRICAL DUCT | | |
| BANK, CONCRETE ENCASED, TWO-WAY SECTION | 212 | LIN FT |
| PAVING EXCAVATION | 300 | CU YDS |

CONSTRUCTION PLANS FOR

HARTNESS MUNICIPAL AIRPORT

CLEARING, GRADING, DRAINAGE, TURFING AND PAVING

AUGUST 30, 1947

AS BUILT DRAWINGS
REFER TO ATTACHED SHEETS TO 4 OF "AS BUILT" DRAWINGS PREPARED BY L.G. BASSO, FEBRUARY 16, 1948 FOR FINAL GRADES AND OTHER AS CONSTRUCTED DETAILS.
ENGINEER _____ DATE _____

CIVIL AERONAUTICS ADMINISTRATION

APPROVED _____ DIRECTOR
DATE _____ AIRPORT ENGINEERING SERVICE

APPROVED _____ SUPERINTENDENT
DATE _____ AIRPORTS BRANCH

APPROVED _____ DISTRICT AIRPORT ENGINEER
DATE _____

VERMONT AERONAUTICS COMMISSION

APPROVED *P. C. Sawyer* CHAIRMAN
DATE *Sept. 26, 1947*

APPROVED _____ DIRECTOR
DATE _____

APPROVED _____ ENGINEER
DATE _____

SPRINGFIELD

APPROVED *H. C. Bellings* CHAIRMAN
DATE *Sept. 23, 1947*
BOARD OF SELECTMEN

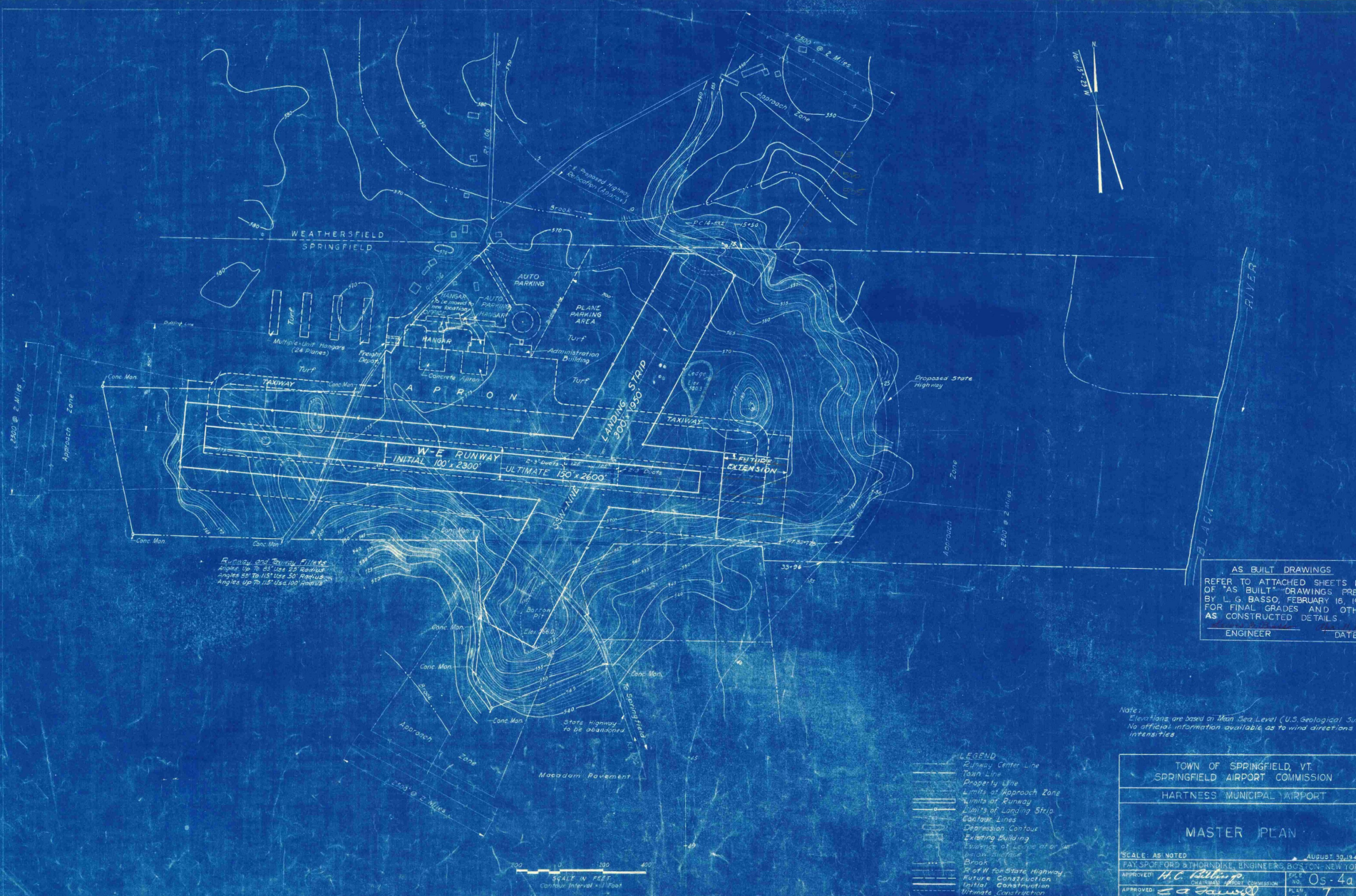
APPROVED *H. C. Bellings* CHAIRMAN AIRPORT COMMISSION
DATE *Sept. 23, 1947*

PREPARED BY

FAY, SPOFFORD & THORNDIKE, ENGINEERS
BOSTON - NEW YORK

APPROVED *E. C. Sawwell* PARTNER IN CHARGE
DATE *SEPT. 16, 1947*

APPROVED *G. J. W. Samuel* AIRPORT ENGINEER
DATE *Sept. 10, 1947*



Runway and Taxiway Fillets
 Angles up to 45° over 25' Runway
 Angles up to 15° over 100' Runway
 Angles up to 75° over 100' Runway

AS BUILT DRAWINGS
 REFER TO ATTACHED SHEETS 1 TO 4
 OF "AS BUILT" DRAWINGS PREPARED
 BY L. G. BASSO, FEBRUARY 16, 1949
 FOR FINAL GRADES AND OTHER
 AS CONSTRUCTED DETAILS

ENGINEER _____ DATE _____

Note:
 Elevations are based on Mean Sea Level (U.S. Geological Survey)
 No official information available as to wind directions or
 intensities

- LEGEND
- Runway Center Line
 - Taxiway Center Line
 - Property Line
 - Limits of Approach Zone
 - Limits of Runway
 - Limits of Landing Strip
 - Contour Lines
 - Depression Contour
 - Existing Building
 - Elevation of Existing Building
 - Proposed Building
 - Proposed Elevation
 - Brook
 - W of W for State Highway
 - Future Construction
 - Initial Construction
 - Ultimate Construction

SCALE IN FEET
 Contour Interval 10' Foot

TOWN OF SPRINGFIELD, VT.
 SPRINGFIELD AIRPORT COMMISSION

HARTNESS MUNICIPAL AIRPORT

MASTER PLAN

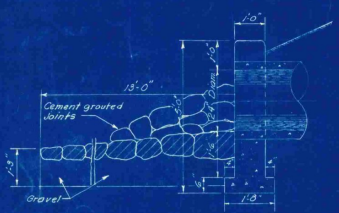
SCALE: AS NOTED AUGUST 30, 1947

PREPARED BY *L. G. Basso* TOWN ENGINEER, BOSTON-NEW YORK

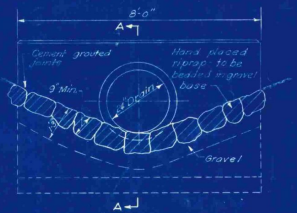
APPROVED BY *L. G. Basso* TOWN ENGINEER, BOSTON-NEW YORK

APPROVED BY *L. G. Basso* TOWN ENGINEER, BOSTON-NEW YORK

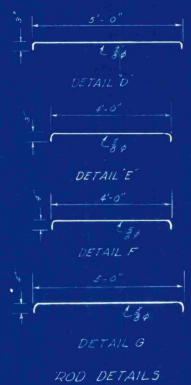
CONTRACT DRAWING SHEET NO. 2 OF 8



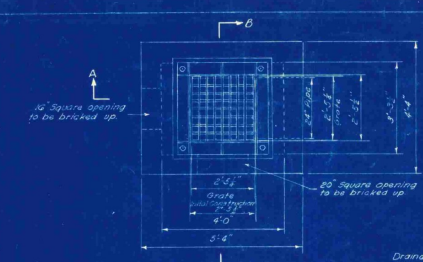
SECTION A-A
HEADWALL DETAILS
Scale 1/4" = 1'-0"



ELEVATION



ROD DETAILS



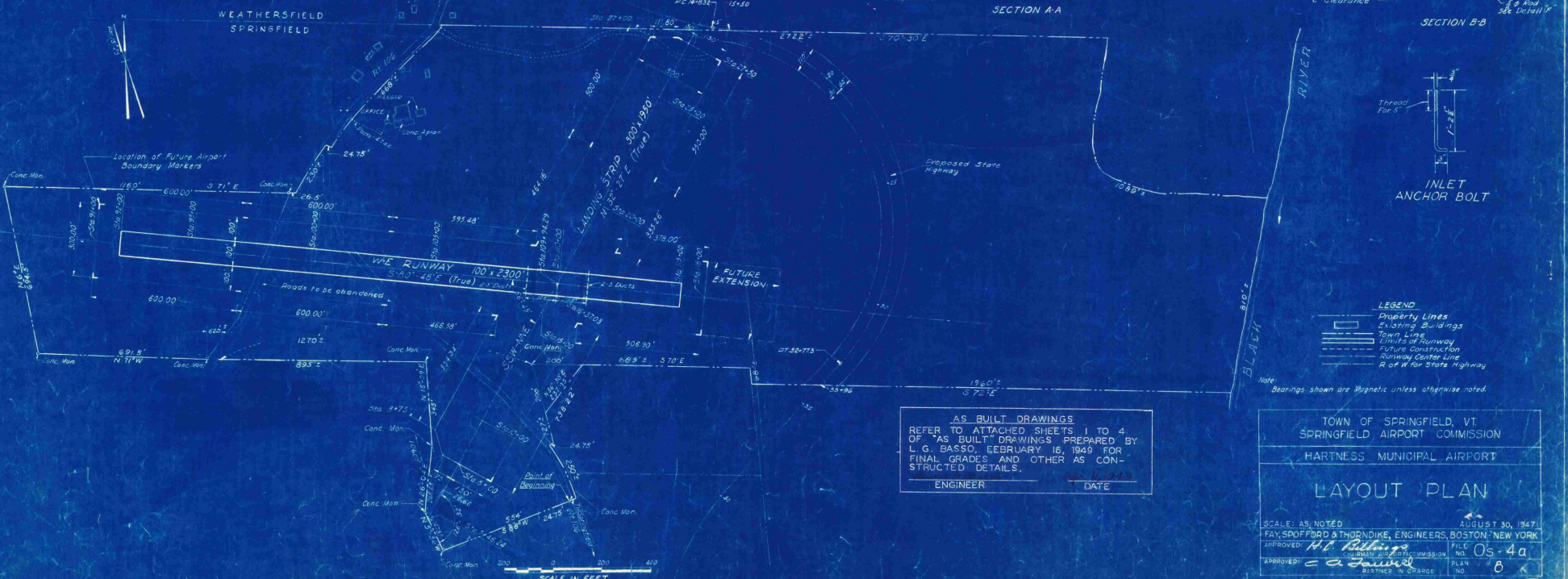
CONSTRUCTION DETAIL
INLET GRATE
INITIAL CONSTRUCTION

Drainage Data
5 Year Storm
A X C X I X A
110X40x13-6.9 c.f.s.

Inlet grate to be designed for a uniform load of 85 lbs. sq. in. of gross area of grate.

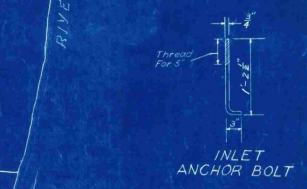


TRENCH DETAIL OF DRAIN
Scale 1/2" = 1'-0"



AS BUILT DRAWINGS
REFER TO ATTACHED SHEETS 1 TO 4
OF "AS BUILT" DRAWINGS PREPARED BY
L. G. BASSO, FEBRUARY 16, 1949 FOR
FINAL GRADES AND OTHER AS CON-
STRUCTED DETAILS.

ENGINEER DATE



INLET ANCHOR BOLT

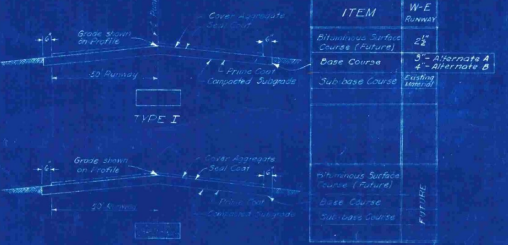
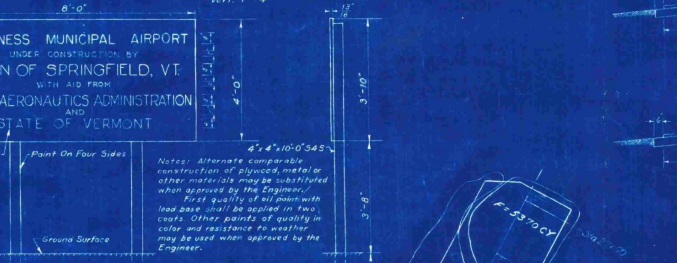
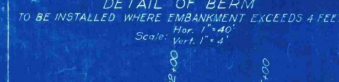
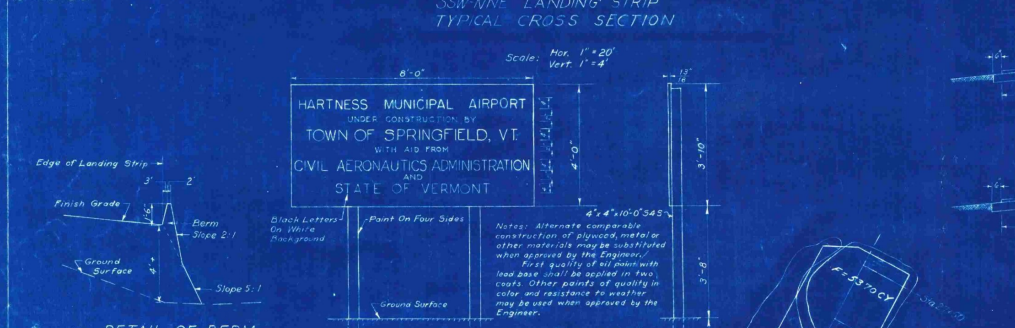
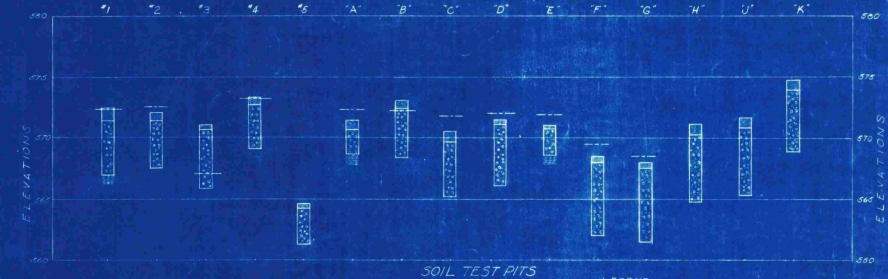
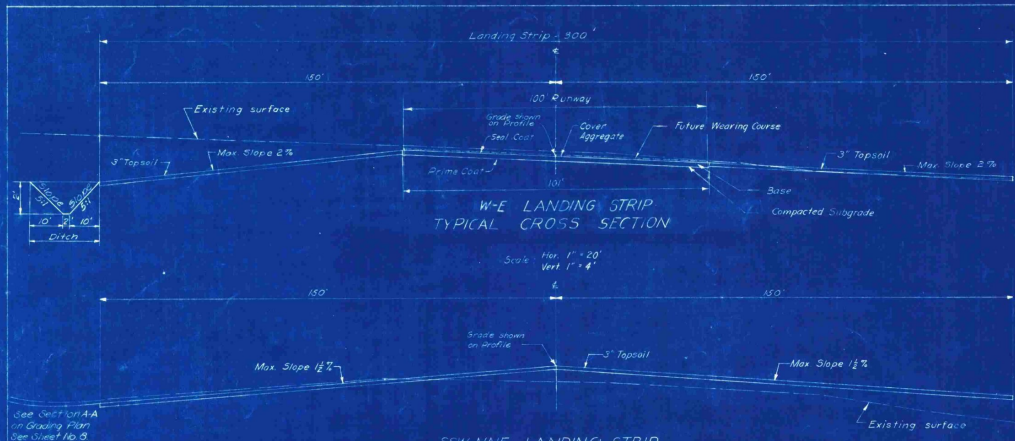
- LEGEND
- Property Lines
 - Existing Buildings
 - Town Line
 - Limits of Runway
 - Future Construction
 - Runway Center Line
 - A or M for State Highway

Note: Bearings shown are Magnetic unless otherwise noted.

TOWN OF SPRINGFIELD, VT.
SPRINGFIELD AIRPORT COMMISSION
HARTNESS MUNICIPAL AIRPORT

LAYOUT PLAN

SCALE: AS NOTED AUGUST 30, 1947
FAY, SPOFFORD & THORNDIKE, ENGINEERS, BOSTON, NEW YORK
APPROVED: *L. G. Basso* FILE NO. 05-4a
APPROVED: *L. G. Basso* COMMISSION NO. 8
DISTRICT IN CHARGE PLAN NO. 8



RANGE OF SOIL CONSTANTS FROM LABORATORY TESTS

| SOIL GROUP NO. IN LAB. | CLASSIFICATION | SOIL IDENTITY | NO. OF TESTS MADE | LIQUID LIMIT | PLASTICITY INDEX |
|------------------------|----------------|-----------------|-------------------|--------------|------------------|
| 1 | E-1 | Gravel and Sand | 1 | 22.7 | N.P. |

| SHRINKAGE LIMIT | SHRINKAGE RATIO | FIELD MOISTURE EQUIVALENT | CALIFORNIA BEARING RATIO | MAX. DENSITY | OPTIMUM MOISTURE |
|-----------------|-----------------|---------------------------|--------------------------|----------------|------------------|
| 24.7 | 1.53 | 25.61 | 37.0% | 109.5 lb/cu ft | 16.6 |

AS BUILT DRAWINGS REFER TO ATTACHED SHEETS 1 TO 4 OF 'AS BUILT' DRAWINGS PREPARED BY L. G. BASSO, FEBRUARY 16, 1949 FOR FINAL GRADES AND OTHER AS CONSTRUCTED DETAILS.

ENGINEER _____ DATE _____

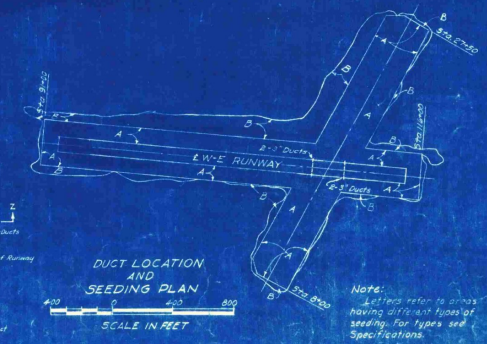
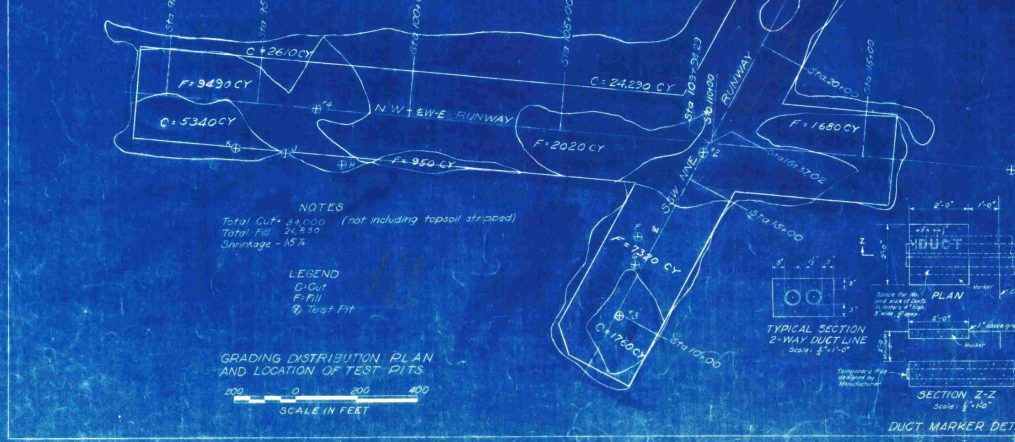
Note: The information obtained from the test pits regarding the character of the material encountered has been recorded in good faith hereto.

There is no expressed or implied agreement that the character of the material or any other information or data regarding the material can be relied upon to indicate the material to be encountered in the carrying out of the work to be done, and it is understood that conditions affecting the cost or quantity of the work to be done may differ from the test pits, which may be indicated by the data obtained from the test pits.

Test Pits A, B, C, D, E, F, G, H, J and K were made and samples taken, Oct 15, 1945.

Test Pits 1, 2, 3, 4 and 5 were made and samples taken June 12, 1947.

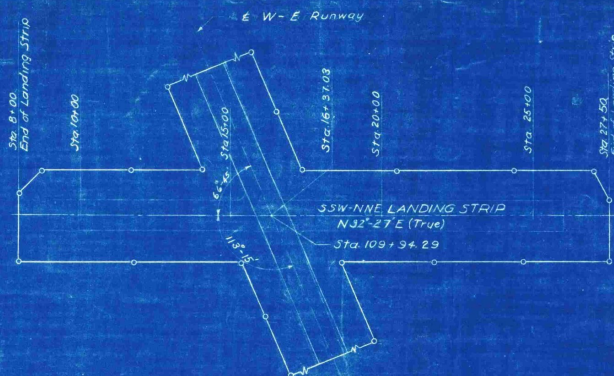
Elevations are based on Mean Sea Level (U. S. Geological Survey).



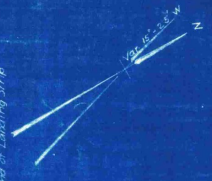
TOWN OF SPRINGFIELD, VT.
 SPRINGFIELD AIRPORT COMMISSION
 HARTNESS MUNICIPAL AIRPORT
 PAVING, CROSS SECTIONS,
 TEST PIT DATA, GRADING DISTRIBUTION
 AND SEEDING PLAN

SCALE AS SHOWN
 FAY, SPENCER & BROWN ENGINEERS, BOSTON-NEW YORK
 APPROVED: *H. G. Basso* PLAN NO. 05-44
 APPROVED: *Edward J. ...* PLAN NO. 10
 CONTRACT DRAWING SHEET NO. 5 OF 8

CS:SEW
 AN:TD
 R:FD
 16: APR 50



PLAN



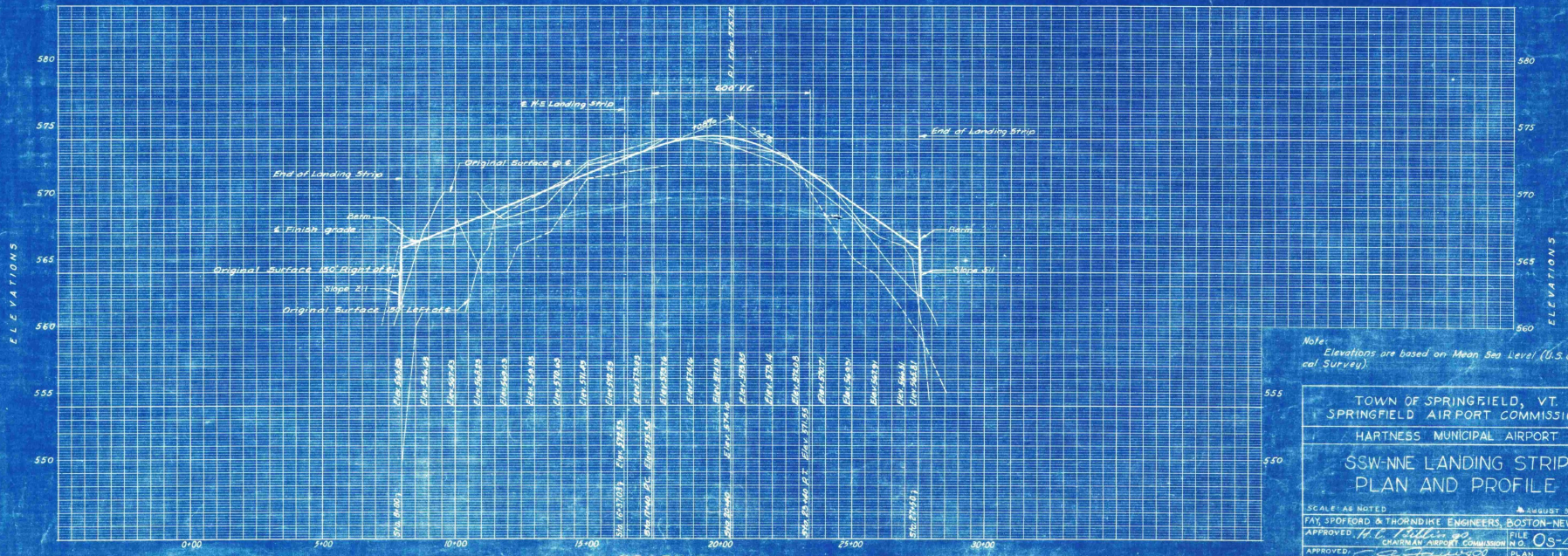
Key Plan

AS BUILT DRAWINGS
 REFER TO ATTACHED SHEETS 1 TO 4
 OF "AS BUILT" DRAWINGS PREPARED BY
 L. G. BASSO, FEBRUARY 16, 1949 FOR
 FINAL GRADES AND OTHER AS
 CONSTRUCTED DETAILS.

ENGINEER _____ DATE _____

LEGEND

- Finish Grade E
- Original Surface @ E
- Original Surface 150' Left of E
- Original Surface 150' Right of E
- Limits of Landing Strip



PROFILE
 Scale: Hor. 1" = 200'
 Vert. 1" = 4'

Note: Elevations are based on Mean Sea Level (U.S. Geological Survey).

TOWN OF SPRINGFIELD, VT.
 SPRINGFIELD AIRPORT COMMISSION
 HARTNESS MUNICIPAL AIRPORT

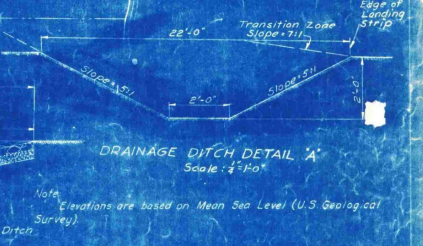
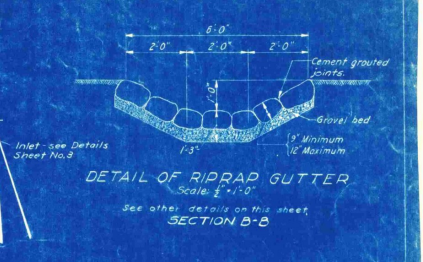
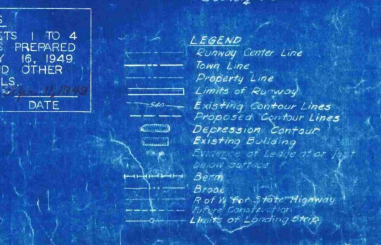
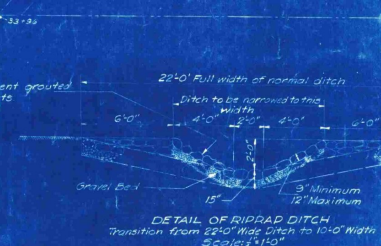
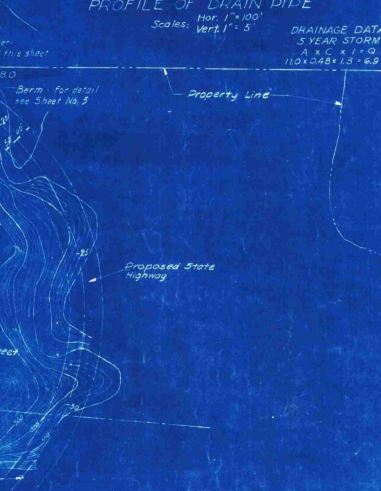
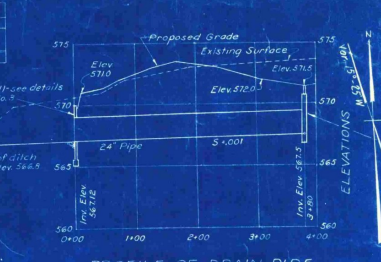
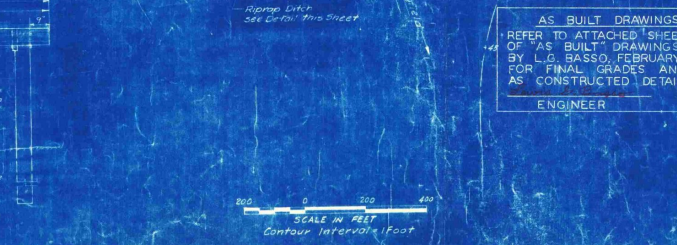
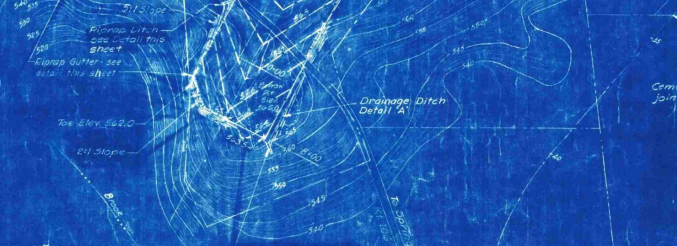
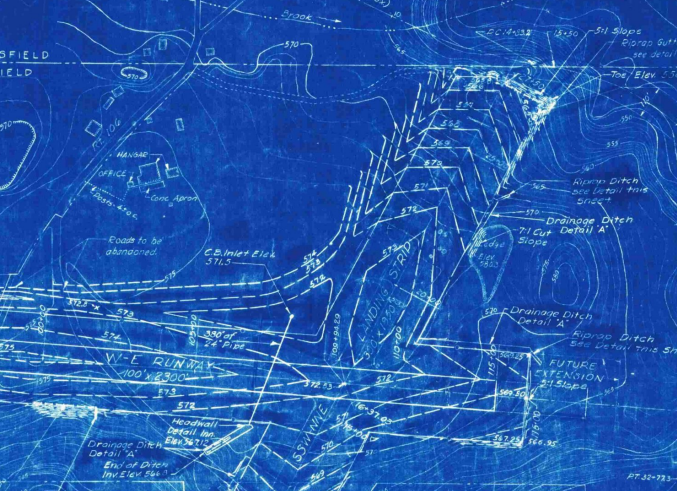
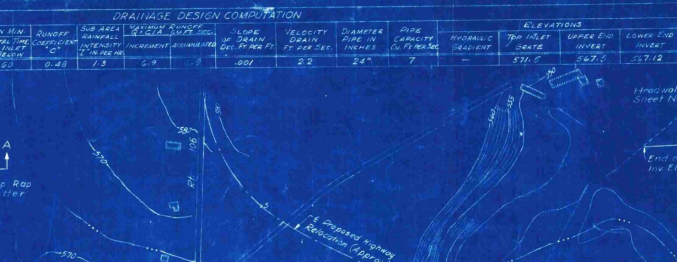
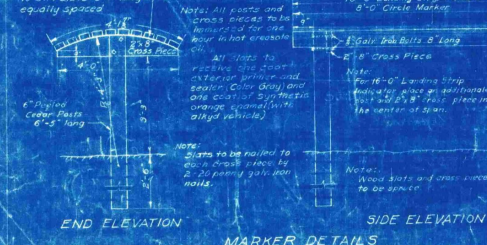
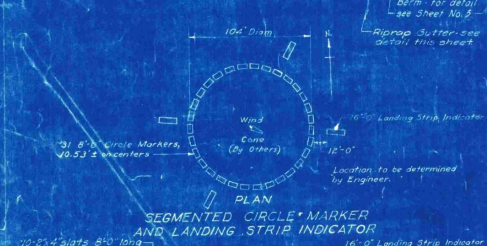
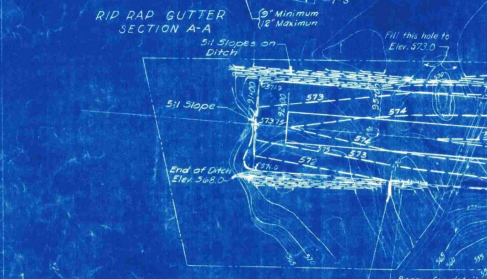
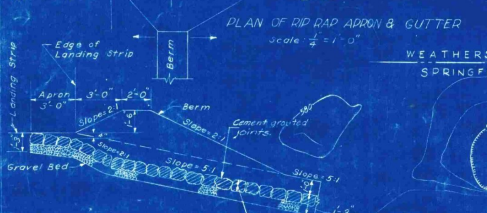
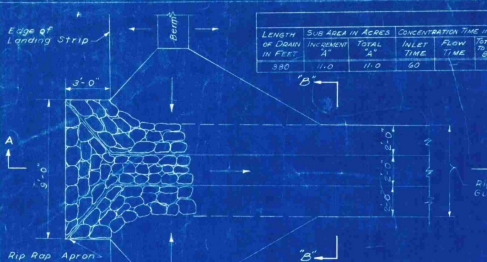
SSW-NNE LANDING STRIP
 PLAN AND PROFILE

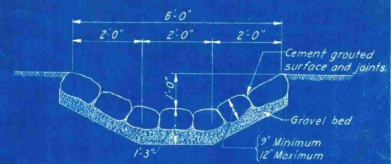
SCALE AS NOTED

FAY, SPOFFORD & THORNDIKE ENGINEERS, BOSTON-NEW YORK
 APPROVED: *H. C. Thill* CHAIRMAN AIRPORT COMMISSION
 APPROVED: *[Signature]* PARTNER IN CHARGE

FILE NO. OS-4a
 PLAN NO. 11

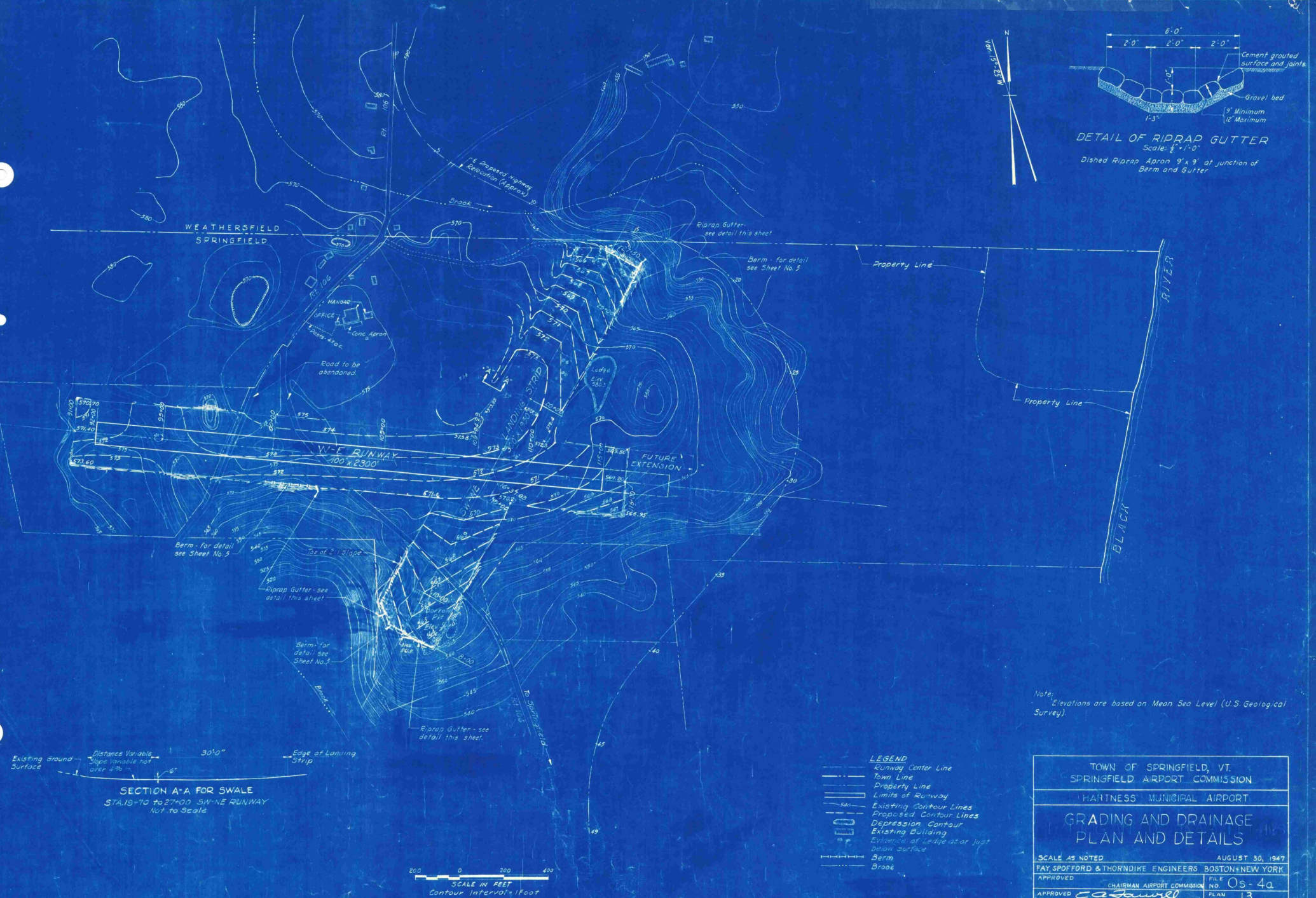
| LENGTH OF DRAIN IN FEET | SUB AREA IN ACRES | CONCENTRATION TIME IN MIN. | | RUNOFF COEFFICIENT | SUB AREA CONTRIBUTING DRAINAGE | | | SLOPE OF DRAIN IN PER CENT | VELOCITY IN FT. PER SEC. | DIAMETER OF PIPE IN INCHES | PIPE CAPACITY IN C.F.PERS. SEC. | HYDRAULIC RESISTANCE | ELEVATIONS | | |
|-------------------------|-------------------|----------------------------|----------|--------------------|--------------------------------|-------|-----------|----------------------------|--------------------------|----------------------------|---------------------------------|----------------------|------------|-------|-------|
| | | INLET | TO INLET | | TO INLET | INLET | UPPER END | | | | | | LOWER END | | |
| 380 | 11.0 | 45 | 60 | 0.48 | 7.3 | 0.9 | 1.8 | .001 | 3.2 | 24" | 7 | — | 576.5 | 576.5 | 571.2 |





DETAIL OF RIPRAP GUTTER
 Scale: $\frac{1}{2}$ " = 1'-0"
 Dished Riprap Apron 9' x 9' at junction of Berm and Gutter

WEATHERSFIELD
 SPRINGFIELD



Berm - for detail see Sheet No. 3

Slope of 2:1 Slope

Riprap Gutter - see detail this sheet

Berm - for detail see Sheet No. 3

Riprap Gutter - see detail this sheet

Existing ground surface - Distance Variable - Slope Variable not over 4% - 30' x 6" - Edge of Landing Strip

SECTION A-A FOR SWALE
 STA. 18+70 to 27+00 SW-NE RUNWAY
 Not to Scale



- LEGEND**
- Runway Center Line
 - Town Line
 - Property Line
 - Limits of Runway
 - Existing Contour Lines
 - Proposed Contour Lines
 - Depression Contour
 - Existing Building
 - Evidence of Ledge or just below surface
 - Berm
 - Brook

Note: Elevations are based on Mean Sea Level (U.S. Geological Survey).

| | |
|--|-----------------------------|
| TOWN OF SPRINGFIELD, VT. | |
| SPRINGFIELD AIRPORT COMMISSION | |
| HARTNESS MUNICIPAL AIRPORT | |
| GRADING AND DRAINAGE PLAN AND DETAILS | |
| SCALE AS NOTED | AUGUST 30, 1947 |
| FAY SPOFFORD & THORNDIKE ENGINEERS BOSTON & NEW YORK | FILE NO. 0s-4a |
| APPROVED | CHAIRMAN AIRPORT COMMISSION |
| APPROVED <i>C. A. Duval</i> | PARTNER IN CHARGE |
| PLAN NO. 13 | |

TOWN OF SPRINGFIELD
VERMONT

INDEX AS CONSTRUCTED DRAWINGS

| SHEET NO | TITLE |
|----------|---|
| 1 | TITLE SHEET |
| 2 | PROPERTY BOUNDS AND DEVELOPMENT |
| 3 | SSW-NNE LANDING STRIP PROFILE PLAN |
| 4 | COMPLETED GRADING AND DRAINAGE ELEVATIONS |

AS CONSTRUCTED PLANS
FOR

HARTNESS MUNICIPAL AIRPORT

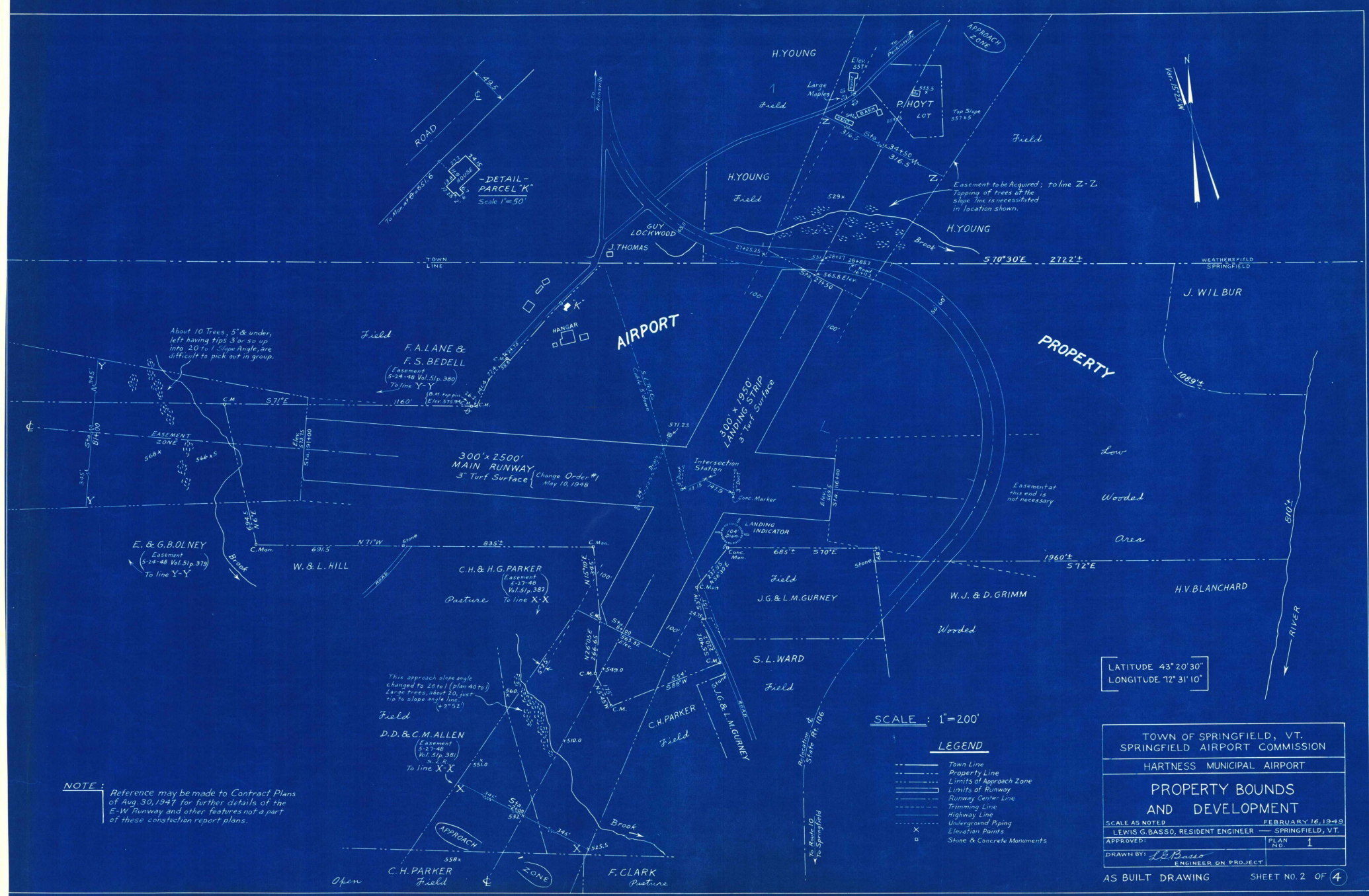
CONSTRUCTION PERIOD APRIL 15—JULY 10

FEBRUARY 16, 1949

SPRINGFIELD
AIRPORT COMMISSION

TITLE SHEET

PLANS BY: *L. L. Basso*
ENGINEER ON PROJECT.



LATITUDE 43° 20' 30"
LONGITUDE 72° 31' 10"

SCALE : 1" = 200'

LEGEND

- Town Line
- Property Line
- Limits of Approach Zone
- Limits of Runway
- Runway Center Line
- Trimming Line
- Highway Line
- Underground Piping
- Elevation Points
- Stone & Concrete Monuments

| | |
|--|---------------------|
| TOWN OF SPRINGFIELD, VT. SPRINGFIELD AIRPORT COMMISSION | |
| HARTNESS MUNICIPAL AIRPORT | |
| PROPERTY BOUNDS AND DEVELOPMENT | |
| SCALE AS NOTED | FEBRUARY 16, 1949 |
| LEWIS G. BASSO, RESIDENT ENGINEER | SPRINGFIELD, VT. |
| APPROVED: | PLAN NO. 1 |
| DRAWN BY: <i>L. B. Bass</i> | ENGINEER ON PROJECT |

NOTE: Reference may be made to Contract Plans of Aug. 30, 1947 for further details of the E-W Runway and other features not a part of these construction report plans.

