

# REDESIGN OF ESSEX JUNCTION AMTRAK STATION

ESSEX JUNCTION, VERMONT



MODEL BY RICK HAMLIN P.E.

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**UNIVERSITY OF VERMONT CAPSTONE PROJECT  
DEPARTMENT OF CIVIL ENGINEERING  
MAY 2012**

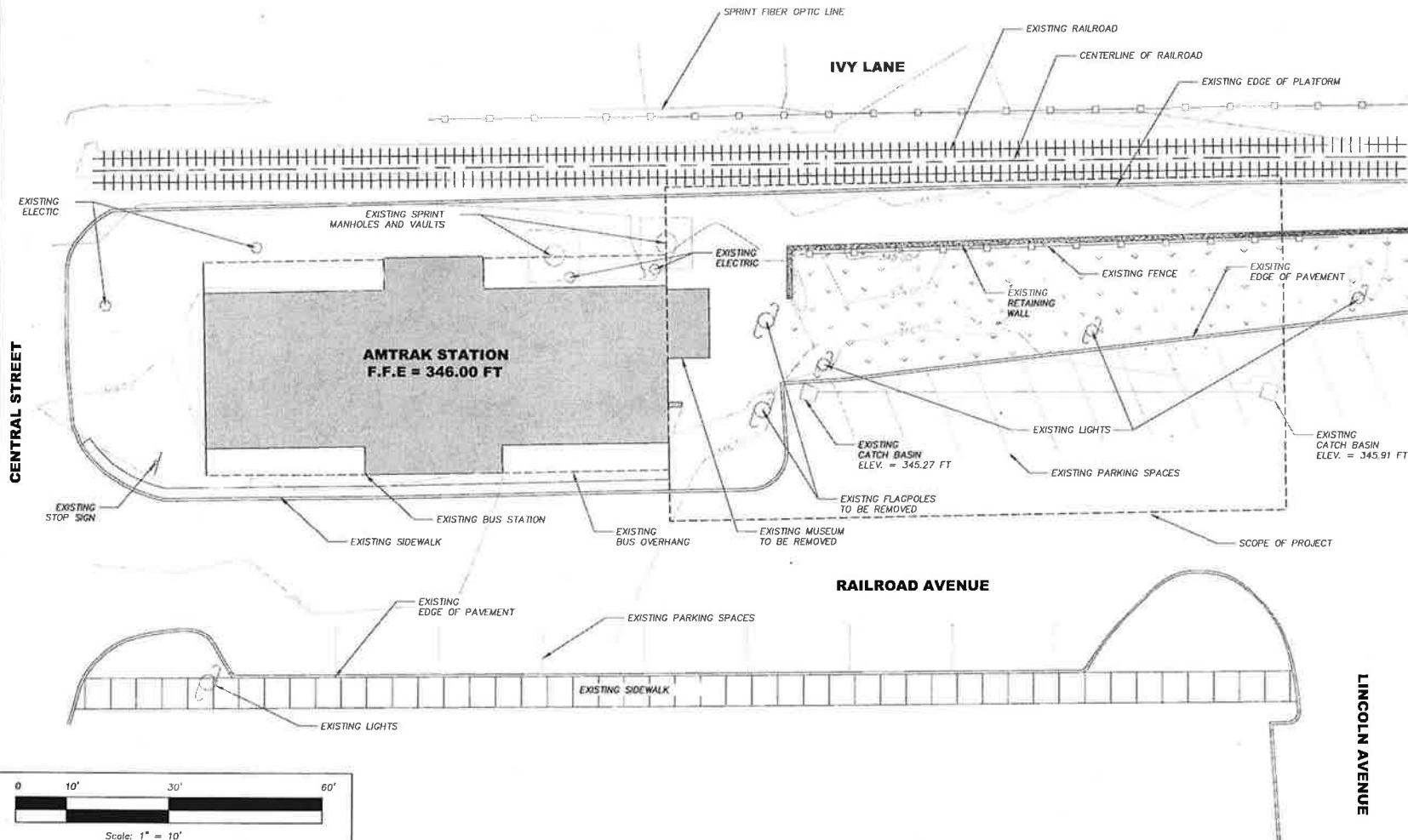
**LAURA GALIHER, MARYGRACE ILARDI, RACHEL LUNA,  
DAVID RIBBANS AND MALLORY SMITH**

COMMUNITY PARTNER: VILLAGE OF ESSEX JUNCTION



# NOTES

1. SURVEY CONDUCTED ON FEBRUARY 18, 2012 ON NAD83 DATUM BY UNIVERSITY OF VERMONT CAPSTONE STUDENTS - LAURA GALIHER, MARYGRACE ILARDI, RACHEL LUNA, DAVID RIBBANS AND MALLORY SMITH.
2. EXISTING SITE PLAN IN ACCORDANCE WITH "STATION AT ESSEX JUNCTION VERMONT-U.S.A" PROJECT DESIGNED BY CANADIAN NATIONAL RAILWAYS OFFICE OF ENGINEERS OF BRIDGES AND STRUCTURES IN 1958.
3. PARKING SPACE LOCATIONS, SIDEWALK WIDTHS AND UTILITY SIZES ARE ALL ESTIMATED BASED ON STANDARD DIMENSIONS.



## KEY



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DATE: 05/11/2012  
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## REDESIGN OF ESSEX JUNCTION AMTRAK STATION

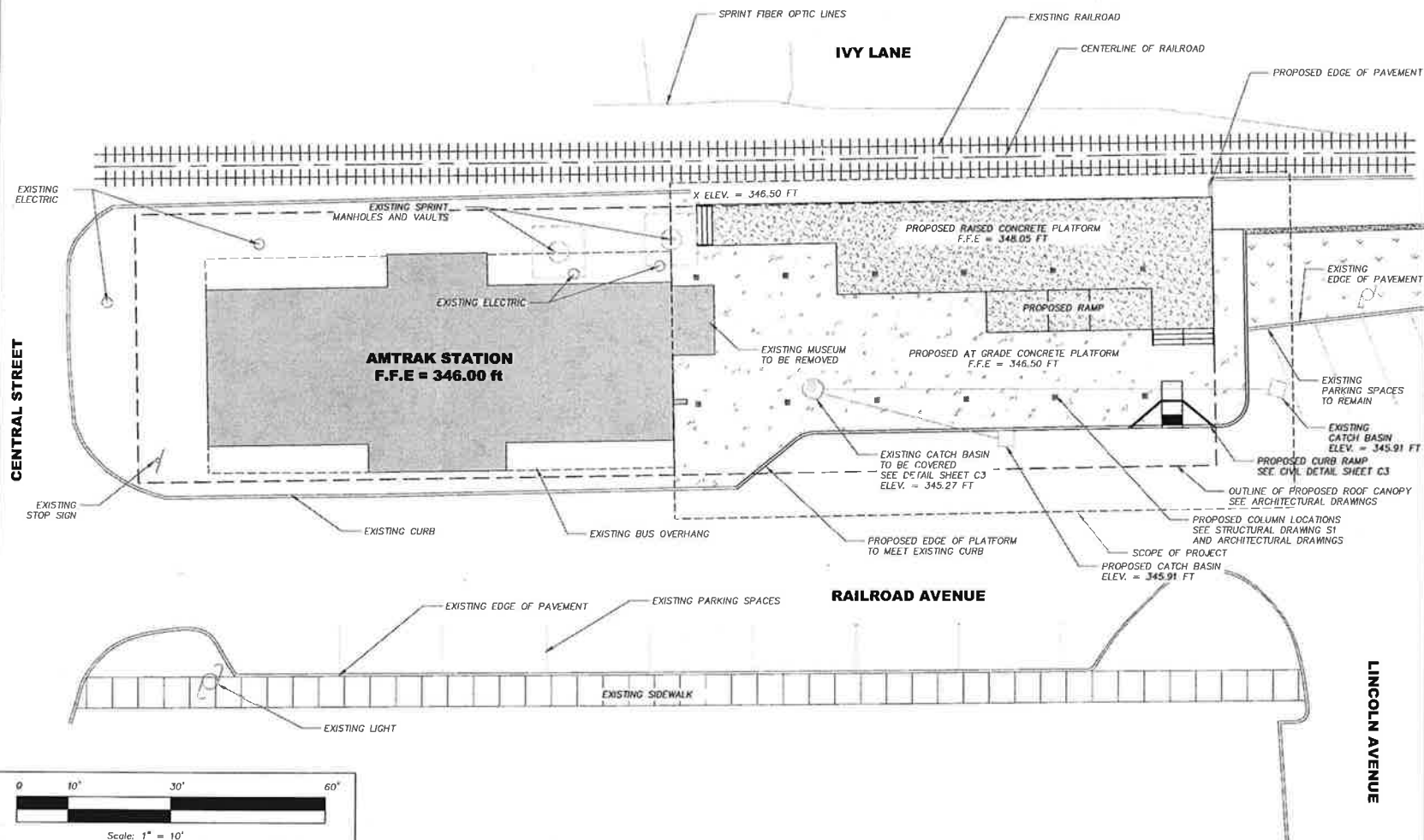
ESSEX JUNCTION VERMONT

### C1 EXISTING SITE PLAN



SHEET: 1 OF 8

- NOTES
1. PROPOSED SITE PLAN DONE IN ACCORDANCE WITH GOOGLE SKETCHUP MODEL BY RICHARD HAMLIN, P.E. AND ARCHITECTURAL DRAWINGS DEVELOPED BY JOHN ALDEN, AIA, NCARB AND LIZA KILCOYNE, NCARB, LEED AP.
  2. SEE STRUCTURAL DRAWINGS FOR PLATFORM AND COLUMN PLACEMENT DIMENSIONS AS WELL AS FOUNDATION PLAN, SECTIONS AND DETAILS.
  3. PROPOSED PLATFORM TO BE LEVELED TO FINISH FLOOR ELEVATION OF 346.00 FEET AND RAISED PLATFORM TO BE FINISHED AT 350.00 FEET
  4. 10 PARKING SPACES TO BE REMOVED WITH CONSTRUCTION OF PROPOSED PLATFORM



# KEY



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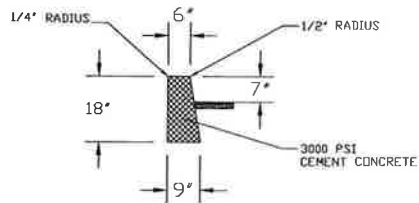
## REDESIGN OF ESSEX JUNCTION AMTRAK STATION

ESSEX JUNCTION VERMONT

### C2 PROPOSED SITE PLAN

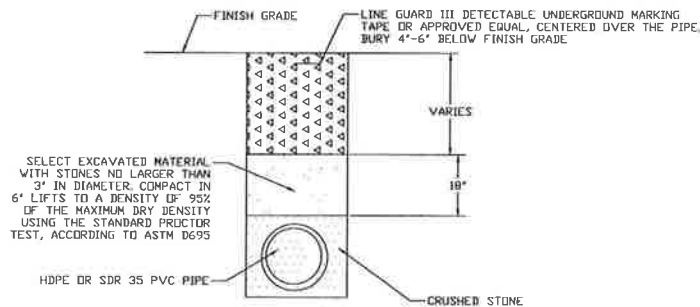
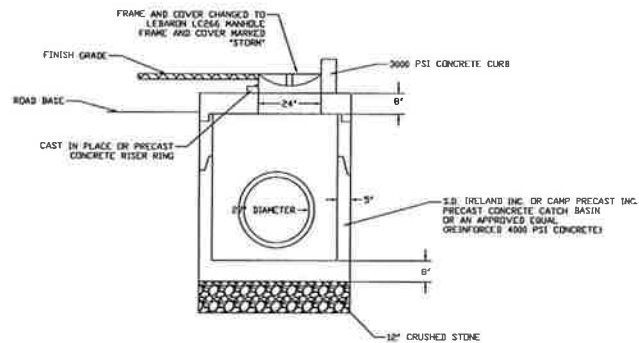
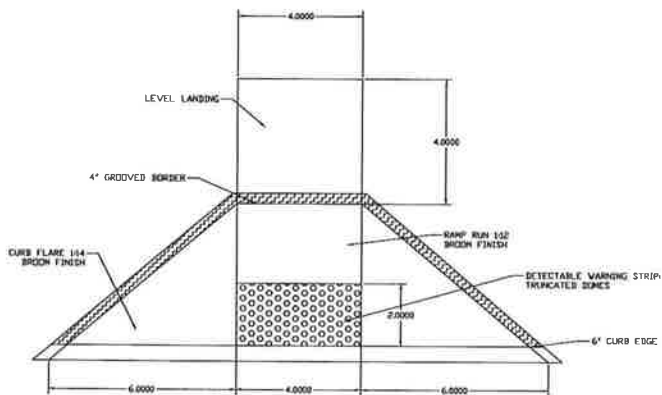


SHEET: 2 OF 8



#### NOTES:

1. CURBING SHALL BE CONSTRUCTED IN 10' SECTIONS WITH 1/8" JOINTS BETWEEN SECTIONS.
2. EXPANSION JOINTS SHALL BE CONSTRUCTED EVERY 20' WITH 1/4" THICK PREFORMED EXPANSION JOINT FILLER MATERIAL CONFORMING TO AASHTO DESIGNATION M-1533.
3. CURB REVEAL AT DRIVEWAYS SHALL BE 1-1/2" MAXIMUM.
4. CURB REVEAL AT ALL HANDICAP ACCESSES SHALL BE A MAXIMUM OF 1/4".
5. ALL RADII LESS THAN 200' SHALL BE FORMED USING FLEXIBLE FORMS.
6. THE PLANT MIXED GRAVEL SHALL BE COMPACTED TO A DENSITY OF 95% OF THE MAXIMUM DRY DENSITY USING THE STANDARD PROCTOR TEST, ACCORDING TO ASTM D698.



TYPICAL TRENCH DETAIL, HDPE AND SDR 35 PVC STORM SEWER

#### KEY



NO.	BY	DATE	DESCRIPTION

DATE: 05/11/2012  
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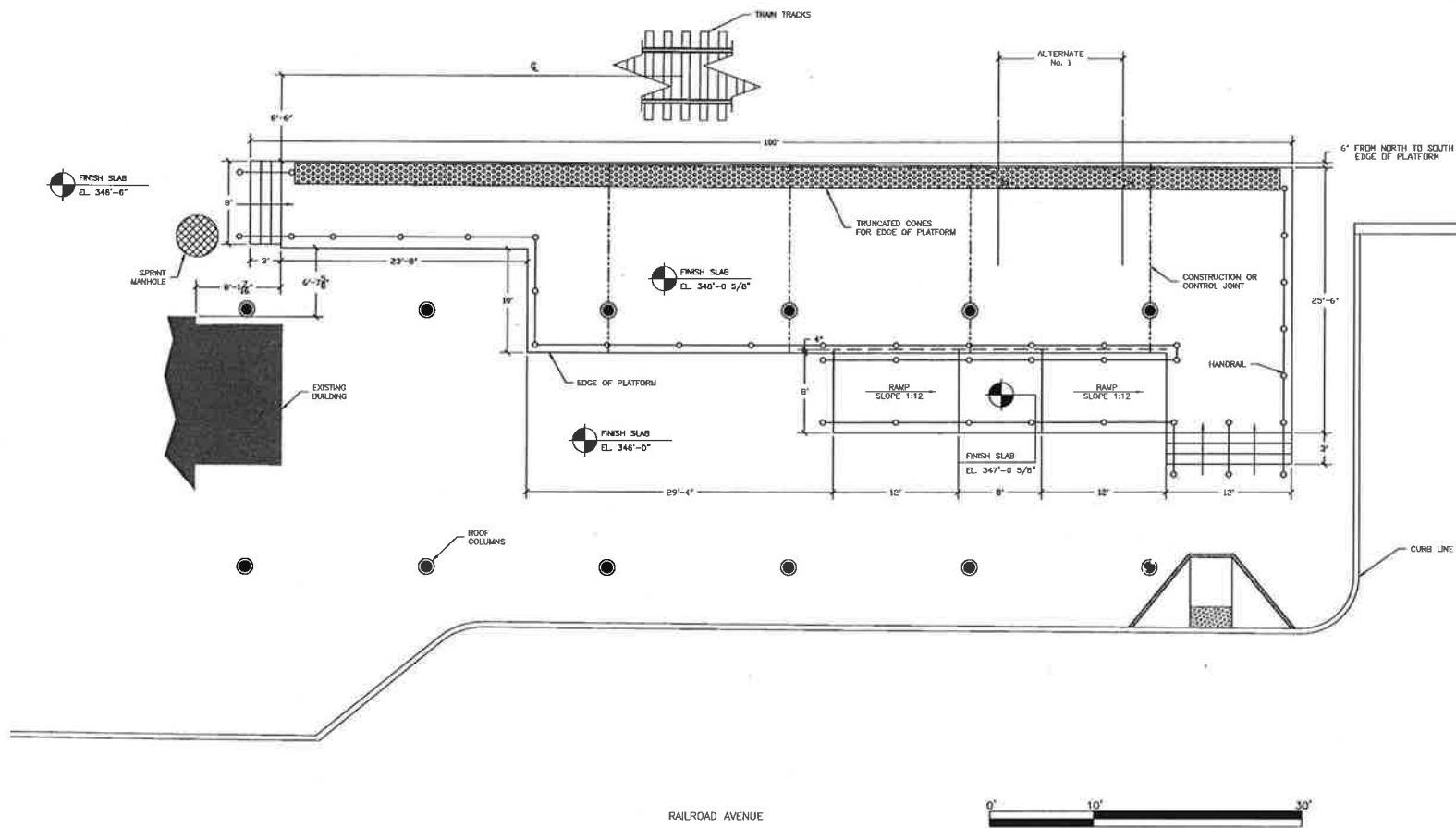
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ESSEX JUNCTION VERMONT

### C3 CIVIL DETAILS

SCALE: VARIES

SHEET: 7 OF XX



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NO.	BY	DATE	DESCRIPTION

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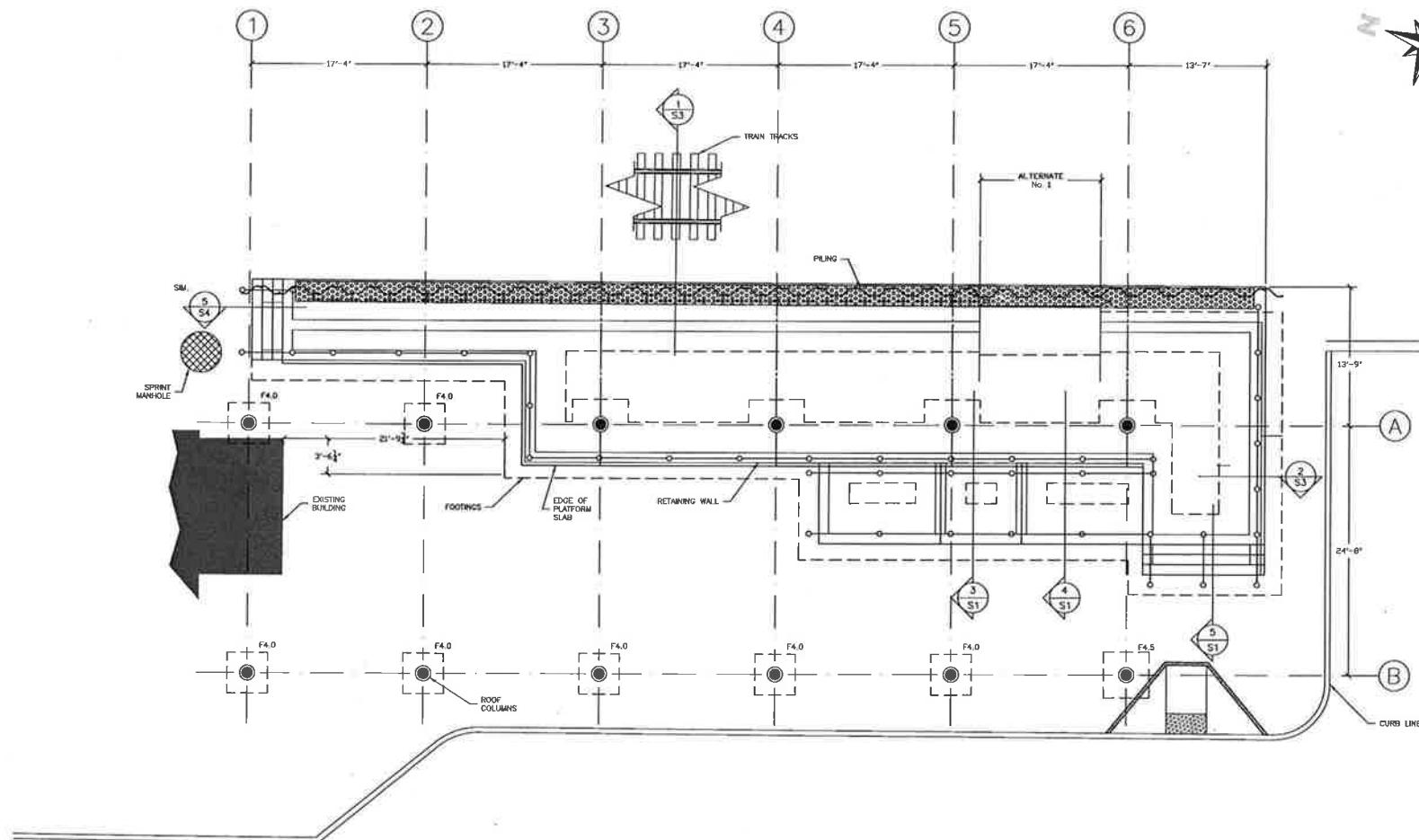
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### S1 PLATFORM PLAN

SCALE: 3/16" = 1'-0"

SHEET: 4 OF 8



FOOTING SCHEDULE			
MARK	SIZE	DEPTH TO BOTTOM	REINFORCING
F4.0	4'-0" SOL. X 1'-0" THICK	6'-0"	ISO #5 X 3'-6" EACH WAY BOTTOM
F4.5	4'-6" SOL. X 1'-0" THICK	6'-0"	ISO #5 X 4'-0" EACH WAY BOTTOM

RAILROAD AVENUE  
FOUNDATION PLAN  
3/16"=1'-0"



# KEY



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DATE: 05/11/2012  
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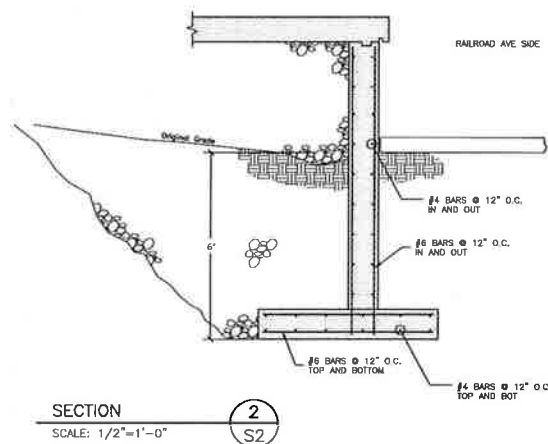
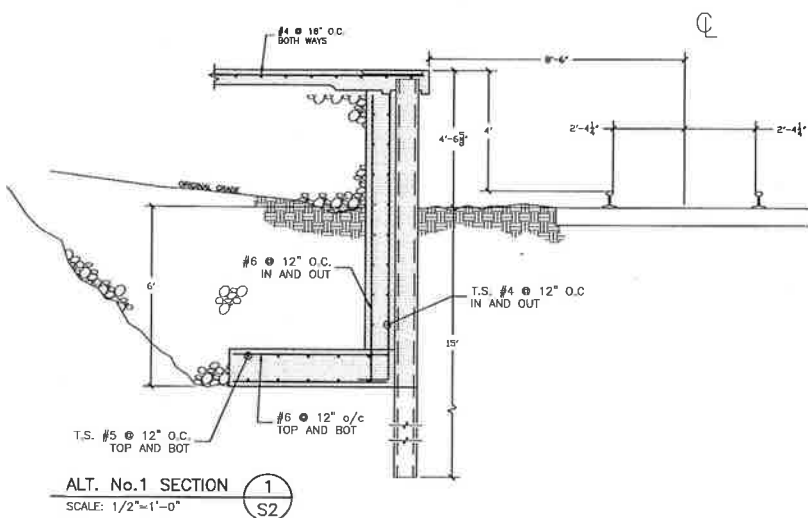
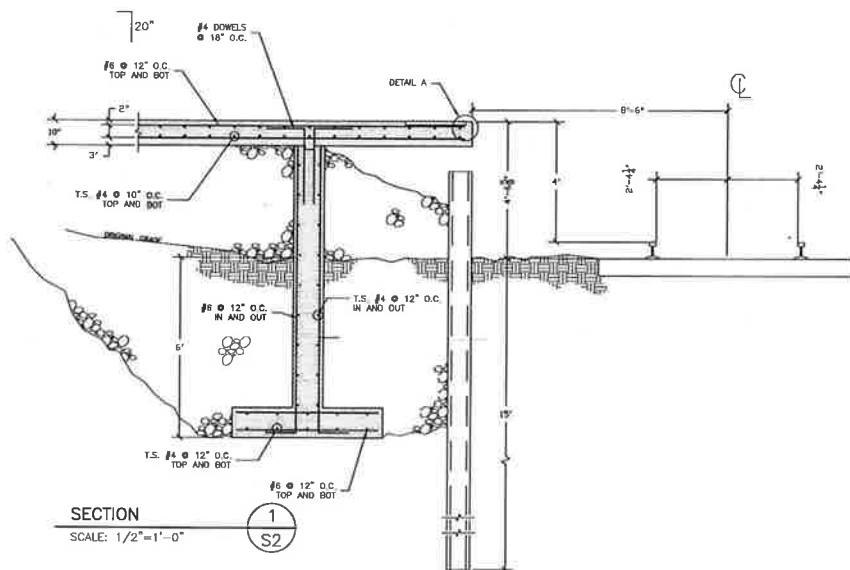
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### S2 FOUNDATION PLAN

SCALE: 3/16" = 1'-0"

SHEET 1 OF XX



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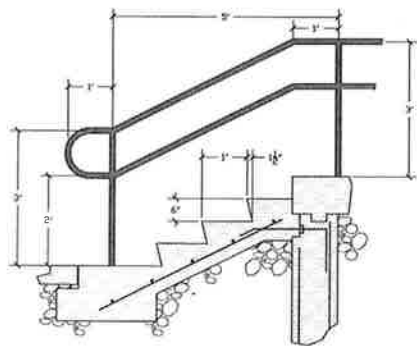
## REDESIGN OF ESSEX JUNCTION AMTRAK STATION

ESSEX JUNCTION VERMONT

### S2 SECTIONS AND DETAILS

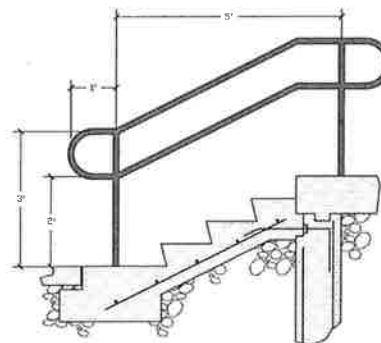
SCALE: VARIES

SHEET: 1 OF XX



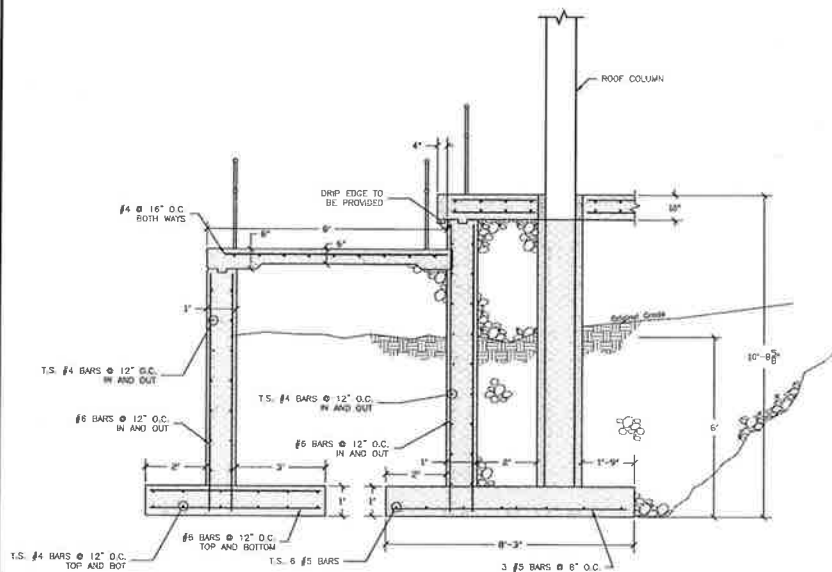
SECTION  
SCALE: 3/4"=1'-0"

5  
S2



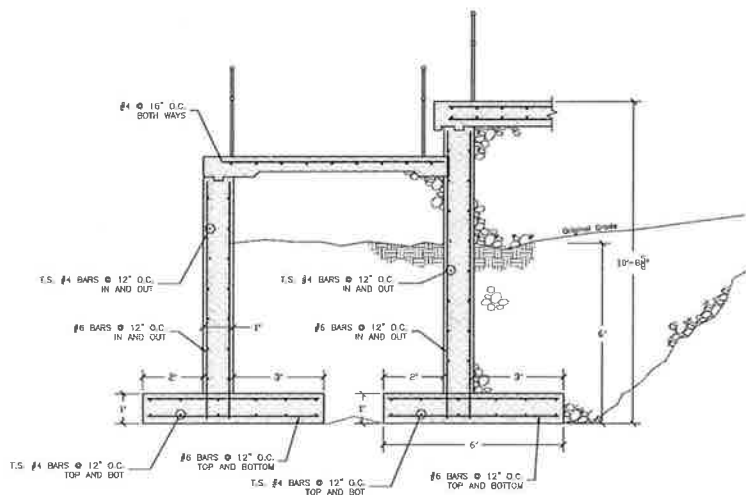
SECTION  
SCALE: 3/4"=1'-0"

5  
S2



SECTION  
SCALE: 1/2"=1'-0"

3  
S2



SECTION  
SCALE: 1/2"=1'-0"

4  
S2

# KEY



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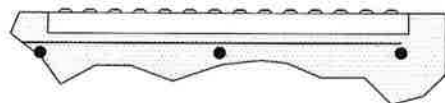
ESSEX JUNCTION VERMONT

### S2 SECTIONS AND DETAILS

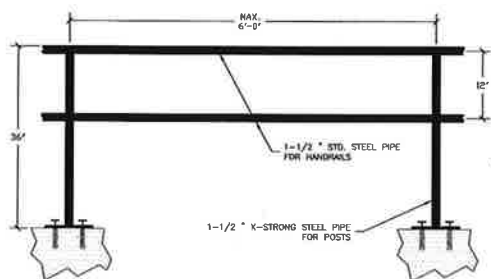
SCALE: VARIES

SHEET: 1 OF XX

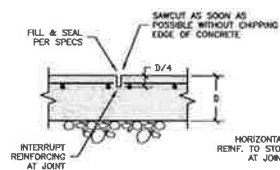




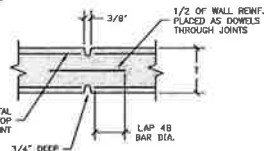
TYPICAL EDGE OF PLATFORM



TYPICAL HANDRAIL DETAILS ON PLATFORM

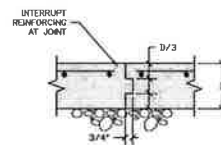


SLAB ON GRADE

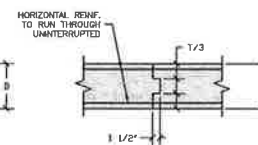


WALL

TYPICAL CONTROL JOINT DETAILS



SLAB ON GRADE



WALL

TYPICAL CONSTRUCTION JOINT DETAILS

KEY



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**REDESIGN OF  
ESSEX JUNCTION  
AMTRAK STATION**

ESSEX JUNCTION VERMONT

**S5  
STRUCTURAL  
DETAILS**

SCALE: VARIES

SHEET: 7 OF XX