

INDEX OF SHEETS

- 1 TITLE SHEET
- 2-3 GENERAL NOTES
- 4 APRON TYPICALS & DETAILS
- 5 EROSION, STRIPING & TIEDOWN DETAILS
- 6 DRAINAGE DETAILS
- 7 ELECTRICAL DETAILS
- 8 LIGHTED HOLD SIGN DETAILS
- 9 RUNWAY HOLD LINE/HOLD SIGN LOCATIONS
- 10 PROJECT WORK AREA PLAN
- 11 CONSTRUCTION PHASING PLAN
- 12-13 CONSTRUCTION PLANS
- 14-15 STRIPING AND TIEDOWN PLANS
- 16 PIPE PROFILES
- 17 CROSS SECTION & PROFILE

VTrans STANDARDS

AP-2	LIGHTING & ELECTRICAL DETAILS	6/1/94
AP-3	MISC. AIRPORT DETAILS	6/1/94
AP-11	TAXIWAY AND APRON MARKING DETAILS	6/1/94
AP-12	SIGN SYSTEMS	6/1/94
D-15	PRECAST REINFORCED CONCRETE CATCH BASIN W/CAST IRON GRATE WITH FRAME TYPE D	6/1/94
D-16	RCP END SECTION	6/1/94

ITEM	DESCRIPTION	UNIT	QUANTITY
203.15	COMMON EXCAVATION	CY	3700
203.16	SOLID ROCK EXCAVATION	CY	16
204.20	TRENCH EXCAVATION OF EARTH	CY	240
404.65	EMULSIFIED ASPHALT	CWT	60
406.50	ASPHALT PRICE ADJUSTMENT (NAB1)	LU	1
524.11	JOINT SEALER HOT POURED	LF	1180
601.0005	12" CSP .064 (2-2/3 X 1/2)	LF	16
601.0010	15" CSP .064 (2-2/3 X 1/2)	LF	24
601.0015	18" CSP .064 (2-2/3 X 1/2)	LF	8
601.0025	24" CSP .064 (2-2/3 X 1/2)	LF	4
601.0811	15" RCP CLASS IV	LF	182
601.0816	18" RCP CLASS IV	LF	199
601.6815	18" RCPES CLASS III	EACH	1
601.995	CLEANING CULVERT PIPE IN PLACE (0-24" DIA. INCLUSIVE)	LF	1470
604.20	PRECAST REINFORCED CONC. CATCH BASIN W/CAST IRON GRATE	EACH	8
604.21	PRECAST REINFORCED CONC. MANHOLE W/CAST IRON COVER (MOD.) (ELECTRIC MANHOLE)	EACH	4
604.40	CHANGING ELEV. OF DROP INLETS, CATCH BASINS OR MANHOLES	EACH	2
609.10	DUST CONTROL WITH WATER	M GAL	1200
609.15	DUST & ICE CONTROL WITH CALCIUM CHLORIDE	TON	3
613.10	STONE FILL, TYPE I	CY	1
613.10	STONE FILL, TYPE I (MOD I) (INLET PROTECTION)	CY	5
613.10	STONE FILL, TYPE I (MOD II) (CHECK DAM)	CY	10
613.10	STONE FILL, TYPE I (MOD III) (TRACKING PAD)	CY	16
631.10	FIELD OFFICE - ENGINEERS	LS	1
631.16	TESTING EQUIPMENT - CONCRETE	LS	1
631.17	TESTING EQUIPMENT - BITUMINOUS	LS	1
631.25	FIELD OFFICE - TELEPHONE (NAB1)	LU	1
635.10	MOBILIZATION	LS	1
649.51	GEOTEXTILE FOR SILT FENCE	SY	520
651.15	SEED	LB	140
651.15	SEED (MOD.)	LB	200
651.18	FERTILIZER	LB	3950
651.20	AGRICULTURAL LIMESTONE	TON	10
651.25	HAY MULCH	TON	10
651.35	TOPSOIL	CY	1200
652.10	EROSION & SEDIMENT CONTROL PLAN	LS	1
652.20	MONITORING EROSION & SEDIMENT CONTROL PLAN	HOUR	350
652.30	FIELD MAINTENANCE OF EROSION & SEDIMENT CONTROL PLAN (NAB1)	LU	1
854.01	P-602 BITUMINOUS PRIME COAT	GAL	13900
854.03	P-625 TAR EMULSION PROTECTIVE SEAL COAT	SY	27800
854.04	P-209, CRUSHED AGGREGATE FOR BASE COURSE	CY	500
854.07	AIRCRAFT TIE DOWN ANCHOR, TYPE A	EACH	96
864.01	P-208A, COLD MIXED RECYCLED BASE COURSE	CY	6300
864.02	P-401, BITUMINOUS CONCRETE PAVEMENT (PG 58-34)	TON	7100
864.03	P-620, RUNWAY AND TAXIWAY PAINTING	SF	7200
864.04	L-108, CABLE TRENCH	LF	550
864.05	L-108, 1/C #8, L-824, TYPE C, 5KV	LF	1100
864.06	L-108, #8 COUNTERPOISE WIRE	LF	550
864.08	L-110, 2-WAY X 4" DIA. U.G. ELECTRICAL DUCT	LF	265
864.09	L-110, 4-WAY X 4" DIA. U.G. ELECTRICAL DUCT	LF	70
864.14	L-125, TAXIWAY GUIDANCE SIGN, (MOD.) (RUNWAY HOLD SIGN)	EACH	9

CONVENTIONAL SYMBOLS

TOWN LINE	---
FENCE LINE	x---x---x---x---
EXISTING ROAD	---
SURVEY LINE	---
CULVERT	---
PROPERTY LINE	---

SURVEYED BY : LITTLE RIVER SURVEY CO.
 SURVEYED DATE : 02/23/01

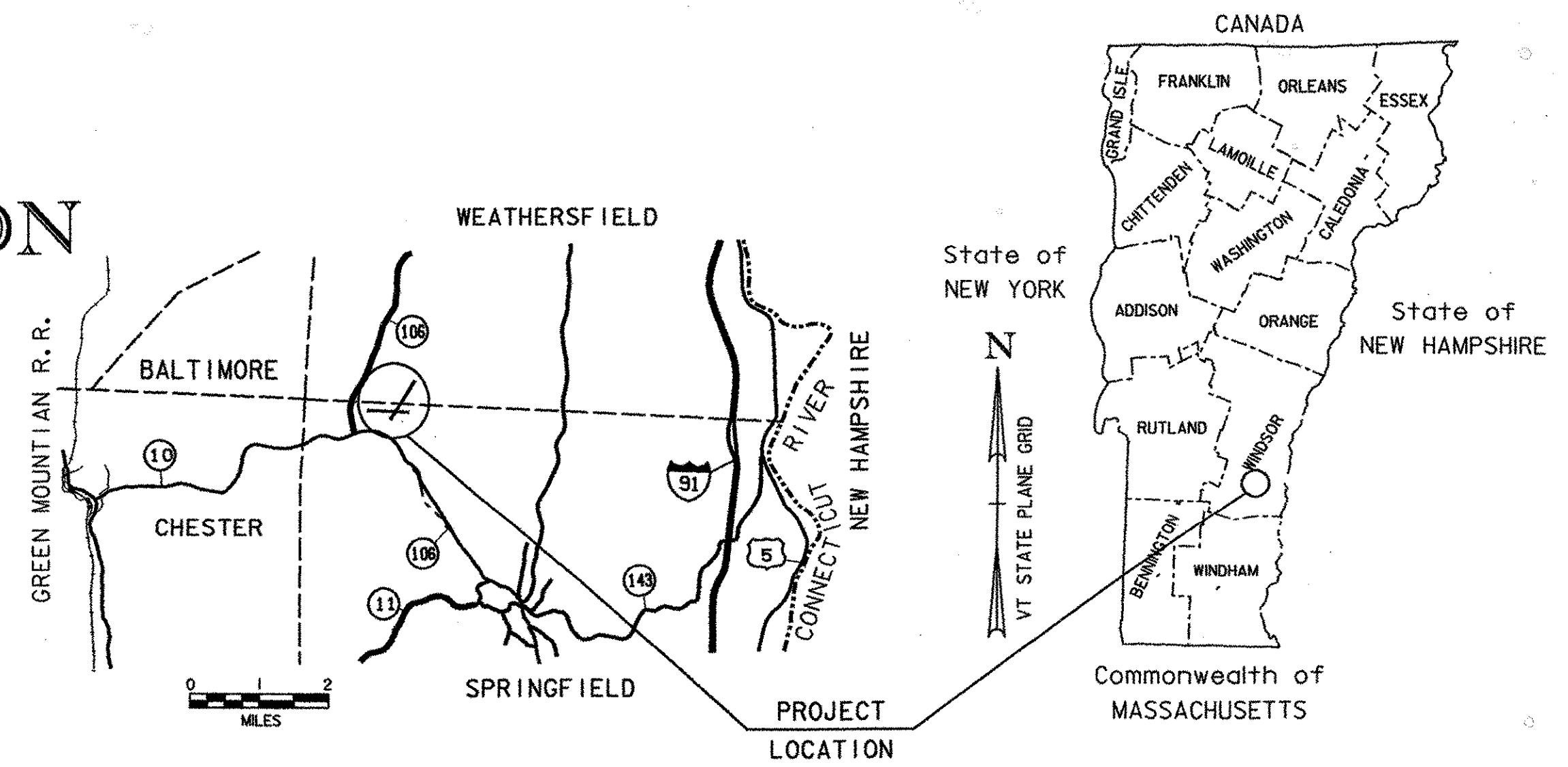
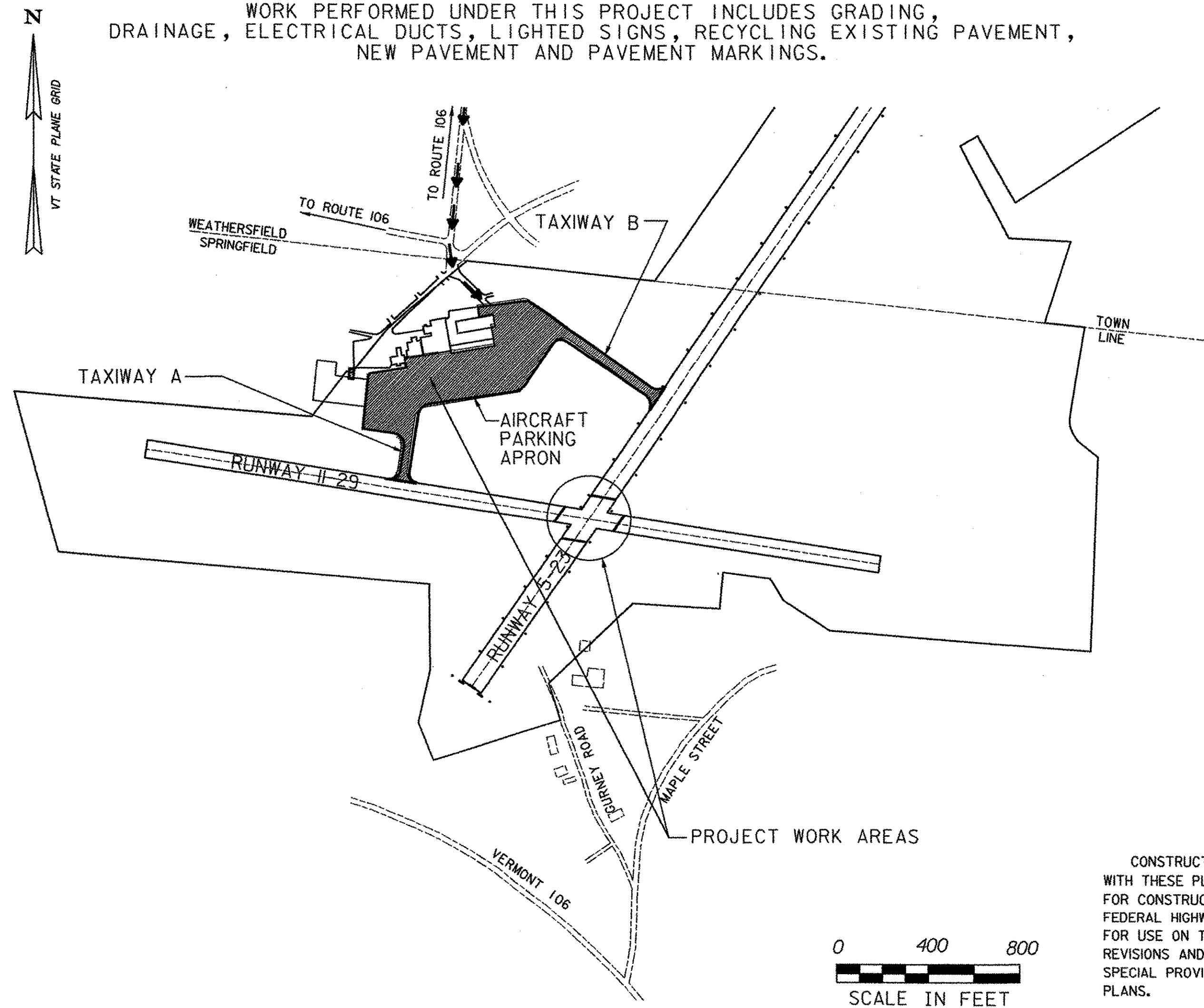
DATUM
 VERTICAL
 HORIZONTAL

STATE OF VERMONT
 AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENTS
 HARTNESS STATE AIRPORT
 TOWN OF SPRINGFIELD
 COUNTY OF WINDSOR
 REHABILITATION OF AIRCRAFT
 PARKING APRON, TAXIWAY A AND
 TAXIWAY B (250,520 +/- S.F.)

WORK PERFORMED UNDER THIS PROJECT INCLUDES GRADING, DRAINAGE, ELECTRICAL DUCTS, LIGHTED SIGNS, RECYCLING EXISTING PAVEMENT, NEW PAVEMENT AND PAVEMENT MARKINGS.



A.I.P. 3-50-0016-02-2002
 PROJECT # AIR 04-3161

RECORD PLANS

CONTRACTOR: PIKE INDUSTRIES - BERLIN, VT

RESIDENT ENGINEER: C. HARDING

CONSTRUCTION BEGAN: SEPTEMBER 22, 2003

CONSTRUCTION COMPLETE: SEPTEMBER 9, 2004

RECORD PLANS BY: C. HARDING

I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY *Charles P. Harding* RESIDENT ENGINEER
 DATE 08/05/04

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

UNLESS NOTED OTHERWISE
 STATIONS ARE IN FEET
 ELEVATIONS ARE IN FEET
 DIMENSIONS ARE IN FEET

FEDERAL AVIATION ADMINISTRATION

APPROVED _____
 MANAGER, AIRPORTS ENGINEERING AND SAFETY BRANCH

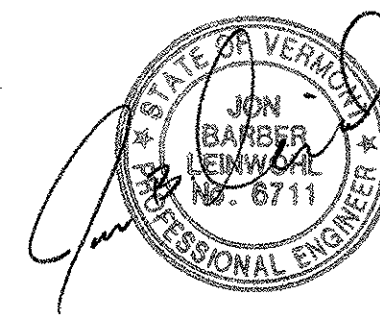
DATE _____

VERMONT AGENCY OF TRANSPORTATION
 DIRECTOR OF PROGRAM DEVELOPMENT

APPROVED *[Signature]*
 DATE 7/2/03

DUPRENE-HENRY, INC. CERTIFIES THAT THE PLANS AND SPECIFICATIONS FOR THE PROJECT WERE PREPARED IN ACCORDANCE WITH THE CRITERIA CONTAINED IN THE CURRENT EDITION OF FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULARS.

APPROVED *[Signature]* ASSOCIATE
 DATE MAR 21, 2003



CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001 AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JANUARY 4, 2001 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

DH Dufrene-Henry

PROJECT NAME: SPRINGFIELD AIR
 PROJECT NUMBER: 04-3161

FILE NAME: \1116a.ppt PLOT DATE: 05/22/2003
 PROJECT LEADER: JBL DRAWN BY: TPL
 DESIGNED BY: TPL CHECKED BY: JBL
 TITLE SHEET SHEET 1 OF 17

GENERAL NOTES

1. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS REFERENCED THEREIN. THE PROJECT IS SUBJECT TO INSPECTION BY REPRESENTATIVES OF THE VERMONT AGENCY OF TRANSPORTATION (VAOT).
2. THE PROJECT IS TO BE COMPLETED IN CONFORMANCE WITH THE "CONSTRUCTION PHASING PLANS AND NOTES," AS CONTAINED IN THE PLANS, AND SHALL BE CONSTRUCTED IN A TIMELY MANNER IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED PROJECT SCHEDULE. THE SCHEDULE SHALL PROVIDE FOR COMPLETION OF THE PHASES AS SHOWN ON THE PLANS AND DESCRIBED IN THE CONTRACT SPECIFICATIONS.
3. THE CONTRACTOR IS EXPECTED TO MEET COMPLETION OF CRITICAL PORTIONS OF THE PROJECT AND OPEN SPECIFIED AIRFIELD SEGMENTS TO TRAFFIC BY THE STATED TIMES AND TO COMPLETE THE ENTIRE PROJECT ON TIME.
4. HARTNESS STATE AIRPORT WILL BE IN OPERATION DURING THE CONSTRUCTION OF THIS PROJECT. COORDINATION OF ALL WORK WITH THE AIRPORT MANAGER AND THE PROJECT RESIDENT ENGINEER IS MANDATORY SO AS TO MINIMIZE IMPACTS ON AIRPORT OPERATIONS.
5. CONSTRUCTION AND MAINTENANCE OPERATIONS BY OTHERS MAY OCCUR CONCURRENTLY AND AT TIMES IN THE VICINITY OF CONSTRUCTION ASSOCIATED WITH THIS PROJECT. THE CONTRACTOR SHALL COORDINATE HIS OPERATIONS AND COOPERATE WITH MAINTENANCE CREWS AND OTHER CONTRACTORS WORKING ON THE AIRPORT.
6. ACCESS TO THE SITE - THE CONTRACTOR'S ACCESS POINTS TO THE SITE ARE SHOWN ON THE OVERALL PROJECT LAYOUT PLAN.
7. HAUL ROUTES - APPROXIMATE LOCATION OF HAUL ROUTES ON THE AIRPORT SITE ARE SHOWN ON THE OVERALL PROJECT LAYOUT PLAN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES (STATE OR TOWN HIGHWAYS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE HAUL ROUTES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. THE BEFORE AND AFTER CONDITION OF ON-SITE HAUL ROUTES SHALL BE JOINTLY INSPECTED AND DETERMINED BY THE CONTRACTOR AND THE ENGINEER. FENCING, DRAINAGE, GRADING AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT TEMPORARY HAUL ROUTES OR ACCESS POINTS ON THE AIRPORT WILL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO COMMENCING THE WORK. EXISTING ACCESS ROADS TO AIRPORT FACILITIES SHALL REMAIN OPEN AND MAINTAINED AT ALL TIMES.
8. CONTRACTOR'S STAGING AREAS - AN AREA WILL BE MADE AVAILABLE FOR CONTRACTOR'S MOBILIZATION AND STORAGE. THIS AREA IS SHOWN ON THE OVERALL PROJECT LAYOUT. THE CONTRACTOR'S STAGING AREA SHALL BE GRADED, TOPSOILED, SEEDDED, AND MULCHED UPON COMPLETION OF USE, AT THE CONTRACTOR'S EXPENSE.
9. DISPOSAL AREA - WASTE AREAS WILL BE MADE AVAILABLE FOR THE DISPOSAL OF THE CONTRACTOR'S SPOIL MATERIALS. THE MANNER IN WHICH MATERIALS ARE PLACED IN EMBANKMENTS (I.E. HEIGHT AND SIDE SLOPES) SHALL BE AS SPECIFIED AND APPROVED BY THE ENGINEER. WASTE MATERIALS INCLUDE THOSE ITEMS WHICH ARE A DIRECT RESULT OF CONSTRUCTION. TRASH (I.E., CANS, PAPER, PACKING, ETC.) SHALL BE DISPOSED OF THROUGH PROPER SANITARY METHODS.
10. SAFETY - THE CONTRACTOR SHALL CONDUCT HIS ACTIVITIES IN A SAFE MANNER AS SPECIFIED IN THE SECTION TITLED, "SAFETY REQUIREMENTS DURING CONSTRUCTION" ON THIS SHEET.
11. PROTECTION OF EXISTING AIRPORT UNDERGROUND CABLES AS SHOWN ON THE PLANS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE LOCATION OF THESE UTILITIES MUST BE VERIFIED BY THE CONTRACTOR. REPAIR OF CABLES DAMAGED DUE TO CONTRACTOR'S OPERATIONS MUST BE STARTED IMMEDIATELY AND CONTINUED UNTIL COMPLETED. ALL SUCH REPAIRS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND SHALL BE AT THE CONTRACTOR'S EXPENSE. WHEN FAA CABLES ARE DAMAGED, REPAIRS SHALL BE DONE IN ACCORDANCE WITH FAA REQUIREMENTS AND IN THE PRESENCE OF AN FAA REPRESENTATIVE. THE FAA MAY ELECT TO HAVE THE REPAIR PERFORMED BY OTHERS IN WHICH CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE INCURRED COST OF REPAIRS.

12. EXISTING AIRFIELD LIGHTING SYSTEMS - INTERRUPTION OF EXISTING AIRFIELD LIGHTING SYSTEMS NOT INCLUDED IN THIS PROJECT SHALL NOT BE PERMITTED. ALL AIRFIELD LIGHTING CIRCUITS AFFECTED BY THIS PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR DURING OPERATIONAL PERIODS IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR AS DIRECTED BY THE ENGINEER.
13. CONSTRUCTION LIMITS - ALL CONTRACTOR VEHICLES AND TRAFFIC (UNLESS OTHERWISE AUTHORIZED) SHALL REMAIN WITHIN THE DESIGNATED CONSTRUCTION LIMITS OR HAUL ROUTES CONSTRUCTION. STORAGE AND STOCKPILING LIMITS ARE FURTHER DEFINED IN THE SECTION TITLED, "SAFETY REQUIREMENTS DURING CONSTRUCTION" ON THIS SHEET.
14. PORTABLE FLOODLIGHTING - THE CONTRACTOR SHALL PROVIDE PORTABLE FLOODLIGHTING WHEN REQUIRED FOR CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL PROVIDE SUFFICIENT UNITS SO THAT ALL WORK AREAS ARE ILLUMINATED TO A LEVEL OF 5 HORIZONTAL FOOT CANDLES. THE LIGHTING LEVELS SHALL BE CALCULATED AND MEASURED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE ILLUMINATION ENGINEERING SOCIETY.
15. THE CONTRACTOR SHALL OBTAIN ALL THE PERMITS AND LICENSES REQUIRED FOR THE PROJECT WORK AT HIS OWN EXPENSE.
16. EXISTING TOPOGRAPHIC FIELD SURVEYS FOR THIS PROJECT AREA WERE PERFORMED BY LITTLE RIVER SURVEY CO. IN FEBRUARY 2001.
17. THE HORIZONTAL CONTROL ON THIS PROJECT IS TIED TO THE 1983 AND 1988 NATIONAL GEODETIC HORIZONTAL AND VERTICAL DATUM, RESPECTIVELY.

SAFETY REQUIREMENTS DURING CONSTRUCTION

- (A) FEDERAL AVIATION ADMINISTRATION (FAA) ADVISORY CIRCULARS (AC), ORDERS AND FEDERAL AVIATION REGULATIONS (FAR),

THE FOLLOWING PUBLICATIONS CONTAIN DEFINITIONS/DESCRIPTIONS OF CRITICAL AIRPORT OPERATING AREAS. THE AREAS DEFINED BELOW PERTAIN TO AIRFIELD SAFETY REQUIREMENTS AND ARE REFERENCED THROUGHOUT THE CONTRACT DOCUMENTS. COPIES OF THESE PUBLICATIONS ARE AVAILABLE THROUGH THE FAA OR CAN BE ORDERED BY MAIL FROM:

U.S. DEPARTMENT OF TRANSPORTATION
SUBSEQUENT DISTRIBUTION OFFICE
ARDMORE EAST BUSINESS CENTER
3341 Q 75TH AVENUE
LANDOVER, MD 20785

AND CAN BE REVIEWED AT THE OFFICES OF THE VERMONT AGENCY OF TRANSPORTATION.

- (1) AC 150/5370-2, "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", CURRENT EDITION.
- (2) FAR PART 77 "OBJECTS AFFECTING NAVIGABLE AIRSPACE", CURRENT EDITION.
- (3) AC 150/5300-13, "AIRPORT DESIGN", CURRENT EDITION, ESTABLISHES DESIGN, OPERATIONAL, AND MAINTENANCE STANDARDS FOR AIRPORTS. STANDARD TERMS USED IN THE CONTRACT PLANS AND SPECIFICATIONS ARE DEFINED BELOW:
 - (A) OBSTACLE FREE ZONE (OFZ) - A VOLUME OF SPACE WHICH IS FREE OF ALL FIXED OBJECTS AND CLEAR OF VEHICLES IN THE PROXIMITY OF AN AIRPLANE CONDUCTING AN APPROACH, MISSED APPROACH, LANDING, TAKEOFF, OR DEPARTURE. THE OFZ IS SHOWN ON THE GENERAL PROJECT LAYOUT PLAN.
 - (B) RUNWAY PROTECTION ZONE (RPZ): A TRAPEZOIDAL AREA CENTERED ON THE RUNWAY BEGINNING AT A POINT 200 FEET BEYOND THE END OF THE AREA USEABLE FOR TAKEOFF OR LANDING.
 - (C) OBJECT FREE AREA (OFA): A TWO DIMENSIONAL GROUND AREA SURROUNDING RUNWAYS, TAXIWAYS, AND TAXILANES WHICH IS CLEAR OF OBJECTS EXCEPT FOR OBJECTS WHOSE LOCATION IS FIXED BY FUNCTION.
 - (D) SAFETY AREA - THE SURFACE ADJACENT TO RUNWAYS, TAXIWAYS AND TAXILANES OVER WHICH AIRCRAFT SHOULD, IN DRY WEATHER, BE ABLE TO CROSS AT NORMAL SPEEDS

WITHOUT INCURRING SIGNIFICANT DAMAGE. A SAFETY AREA IS GRADED, DRAINED AND COMPACTED. IT IS FREE OF ANY HOLES, TRENCHES, BUMPS OR OTHER SIGNIFICANT SURFACE VARIATIONS OR OBJECTS OTHER THAN THOSE WHICH ARE REQUIRED BECAUSE OF THEIR ESSENTIAL AERONAUTICAL FUNCTION. THE SAFETY AREA REQUIRES THE CAPABILITY OF SUPPORTING MAINTENANCE VEHICLES AND AIRCRAFT RESCUE AND FIRE FIGHTING VEHICLES UNDER NORMAL (DRY) CONDITIONS.

(B) **GENERAL SAFETY REQUIREMENTS**

- (1) THE CONTRACTOR SHALL ACQUAINT HIS SUPERVISORS AND EMPLOYEES WITH THE AIRPORT ACTIVITY AND OPERATIONS THAT ARE INHERENT TO HARTNESS STATE AIRPORT AND SHALL CONDUCT HIS CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND GUIDELINES FOR SAFETY SPECIFIED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SAFETY DEVICES AS REQUIRED FOR THE PROTECTION OF HIS PERSONNEL.
- (2) PROTECTION OF ALL PERSONS SHALL BE PROVIDED THROUGHOUT THE PROGRESS OF THE WORK. THE WORK SHALL PROCEED IN SUCH A MANNER AS TO PROVIDE SAFE CONDITIONS FOR ALL WORKERS AND AGENCY PERSONNEL. THE SEQUENCE OF OPERATION SHALL BE SUCH THAT MAXIMUM PROTECTION IS AFFORDED TO INSURE THAT PERSONNEL AND WORKERS IN THE WORK AREA ARE NOT SUBJECT TO ANY DANGEROUS CONDITIONS.
- (3) DURING PERFORMANCE OF THIS CONTRACT, THE AIRPORT RUNWAYS, TAXIWAYS, AND AIRCRAFT PARKING APRONS SHALL REMAIN IN USE BY AIRCRAFT TO THE MAXIMUM EXTENT POSSIBLE. ALL AIRCRAFT TRAFFIC ON THESE AREAS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. THE OWNER RESERVES THE RIGHT TO ORDER THE CONTRACTOR AT ANY TIME TO VACATE ANY AREA NECESSARY TO MAINTAIN SAFE AIRCRAFT OPERATIONS. USE OF AREAS NEAR THE CONTRACTOR'S WORK WILL BE CONTROLLED TO MINIMIZE DISTURBANCE TO THE CONTRACTOR'S OPERATION. THE CONTRACTOR SHALL NOT ALLOW EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, OR ANY OTHER UNAUTHORIZED PERSON TO ENTER OR REMAIN IN ANY AIRPORT AREA WHICH WOULD BE HAZARDOUS TO PERSONS OR TO AIRCRAFT OPERATIONS.
- (4) ALL WORK TO BE PERFORMED WHICH IS CLOSE TO AN ACTIVE RUNWAY, TAXIWAY OR APRON SHALL BE PERFORMED WHEN THE RUNWAY, TAXIWAY OR APRON IS NOT IN USE. SUCH WORK SHALL BE ACCOMPLISHED ONLY WITH PRIOR PERMISSION FROM THE ENGINEER AND AIRPORT MANAGER. REQUESTED CLOSINGS SHALL BE DIRECTED TO THE ENGINEER AT LEAST 48 HOURS IN ADVANCE.

C. **CONSTRUCTION AND FACILITIES MAINTENANCE**

- (1) THE FOLLOWING ARE CONSIDERED SAFETY PROBLEMS AND/OR HAZARDS:
 - (A) TRENCHES, HOLES, OR EXCAVATION ON OR ADJACENT TO ANY OPEN RUNWAY OR IN RUNWAY OR TAXIWAY SAFETY AREAS.
 - (B) UNMARKED/UNLIGHTED HOLES OR EXCAVATION IN ANY APRON, OPEN TAXIWAY, OPEN TAXILANE, OR RELATED SAFETY AREA.
 - (C) MOUNDS OR PILES OF EARTH, CONSTRUCTION MATERIALS, TEMPORARY STRUCTURES, OR OTHER OBJECTS IN THE VICINITY OF ANY OPEN RUNWAY, TAXIWAY, TAXILANE, OR IN ANY RELATED SAFETY, APPROACH, OR DEPARTURE AREA.
 - (D) VEHICLES OR EQUIPMENT, WHETHER OPERATING OR IDLE, ON ANY OPEN RUNWAY, TAXIWAY, TAXILANE OR IN ANY RELATED SAFETY, APPROACH, OR DEPARTURE AREA.
 - (E) VEHICLES, EQUIPMENT, EXCAVATION, STOCKPILES, OR OTHER MATERIALS WHICH COULD INTERFERE WITH ELECTRONIC SIGNALS FROM RADIOS OR ELECTRONIC NAVIGATIONAL AIDS (NAVAIDS).
 - (F) PAVEMENT DROP-OFFS - LIPS (EITHER PERMANENT OR TEMPORARY) WHICH COULD CAUSE DAMAGE TO AIRCRAFT IF CROSSED AT NORMAL OPERATING SPEEDS. THE NORMAL MAXIMUM DROP-OFF OR LIP IS 1-1/2 INCHES.
 - (G) UNMARKED UTILITY, NAVAID, WEATHER SERVICE, RUNWAY LIGHTING, OR OTHER POWER OR SIGNAL CABLES THAT COULD BE DAMAGED DURING CONSTRUCTION.
 - (H) OBJECTS, WHETHER OR NOT MARKED OR FLAGGED, OR ACTIVITIES ANYWHERE ON OR IN THE VICINITY OF THE AIRPORT WHICH COULD BE DISTRACTING, CONFUSING, OR ALARMING TO PILOTS DURING AIRCRAFT OPERATIONS.

- (I) UNFLAGGED/UNLIGHTED LOW VISIBILITY ITEMS SUCH AS TALL CRANES, DRILLS, AND THE LIKE ANYWHERE IN THE VICINITY OF ACTIVE RUNWAYS, OR IN ANY APPROACH OR DEPARTURE AREA.
- (J) MISLEADING OR MALFUNCTIONING OBSTRUCTION LIGHTS OR UNLIGHTED/UNMARKED OBSTRUCTIONS IN THE APPROACH TO ANY ACTIVE RUNWAY.
- (K) WATER, SNOW, DIRT, DEBRIS, OR OTHER TRANSIENT ACCUMULATION WHICH TEMPORARILY OBSCURES PAVEMENT MARKINGS OR PAVEMENT EDGES, OR DEROGATES VISIBILITY OF RUNWAY/TAXIWAY MARKINGS OR LIGHTING.
- (L) INADEQUATE OR IMPROPER METHODS OF MARKING, BARRICADING, AND LIGHTING OF TEMPORARILY CLOSED PORTIONS OF THE AIRPORT OPERATING AREAS.
- (M) TRASH OR OTHER MATERIALS WITH FOREIGN OBJECT DAMAGE (FOD) POTENTIAL; WHETHER ON RUNWAYS, TAXIWAYS, OR APRONS; OR IN RELATED SAFETY AREAS.
- (N) INADEQUATE BARRICADING OR OTHER MARKING WHICH IS PLACED TO SEPARATE CONSTRUCTION OR MAINTENANCE AREAS FROM OPEN AIRCRAFT OPERATING AREAS.
- (O) FAILURE TO CONTROL UNAUTHORIZED VEHICLE AND HUMAN ACCESS TO ACTIVE AIRCRAFT OPERATING AREAS.
- (P) FAILURE TO MAINTAIN RADIO COMMUNICATION BETWEEN CONSTRUCTION/MAINTENANCE VEHICLES AND HARTNESS UNICOM.
- (Q) CONSTRUCTION/MAINTENANCE ACTIVITIES OR MATERIALS WHICH COULD HAMPER THE RESPONSE OF AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) EQUIPMENT FROM REACHING ALL AIRCRAFT OR ANY PART OF THE RUNWAY/TAXIWAY SYSTEM, RUNWAY APPROACH AND DEPARTURE AREAS AND AIRCRAFT PARKING LOCATIONS.
- (R) BIRD ATTRACTANTS ON AIRPORT SUCH AS: EDIBLES (FOOD SCRAPS, ETC.), MISCELLANEOUS TRASH, OR PONDED WATER.
- (2) THE CONTRACTOR SHALL CONDUCT ACTIVITIES SO AS NOT TO VIOLATE ANY SAFETY STANDARDS CONTAINED HEREIN. THE CONTRACTOR SHALL INSPECT ALL CONSTRUCTION AND STORAGE AREAS AS OFTEN AS NECESSARY AND PROMPTLY TAKE ALL STEPS NECESSARY TO PREVENT/REMEDY ANY UNSAFE OR POTENTIALLY UNSAFE CONDITIONS OR ACTIVITIES DISCOVERED.
- (3) THE VAOT WILL BE RESPONSIBLE FOR ISSUING APPROPRIATE NOTICE TO AIRMEN (NOTAM) CONCERNING CONSTRUCTION ACTIVITY ON THE AIRFIELD.

D. **MOTORIZED VEHICLES**

THIS PROJECT INCLUDES WORK WITHIN THE AIRCRAFT OPERATIONS AREA (AOA). ALL PERMITTED VEHICLES SHALL BE EQUIPPED WITH A FLASHING AMBER (YELLOW) DOME-TYPE LIGHT, MOUNTED ON TOP OF THE VEHICLE AND OF SUCH INTENSITY TO CONFORM TO LOCAL CODES FOR MAINTENANCE AND EMERGENCY VEHICLES. ALL VEHICLES OPERATING WITHIN THE AIRFIELD BOUNDARY SHALL BE IDENTIFIED WITH A SIGN ON EACH SIDE OF THE VEHICLE BEARING THE CONTRACTOR'S NAME IN 12-INCH MINIMUM LETTER HEIGHT.

VEHICLES MAKING ONLY OCCASIONAL VISITS TO THE JOB SITE ARE EXEMPT FROM THE IDENTIFICATION REQUIREMENTS CONTAINED HEREIN ABOVE PROVIDED THAT THEY ARE ESCORTED INTO, THROUGH, AND OUT OF THE AIRPORT AREA BY A PROPERLY IDENTIFIED VEHICLE.

E. **RADIO COMMUNICATIONS**

RADIO COMMUNICATIONS ARE REQUIRED BETWEEN THE CONTRACTOR'S REPRESENTATIVE AND HARTNESS UNICOM. RADIO CONTACT IS REQUIRED AT ALL TIMES WHILE THE CONTRACTOR HAS PERSONNEL AND EQUIPMENT ON THE PROJECT SITE AND WHILE THEY ARE IN AN ACTIVE AIR OPERATIONS AREA (AOA) OF THE AIRPORT. RADIOS SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE CAPABLE OF TRANSMITTING AND RECEIVING AT A GROUND CONTROL FREQUENCY OF 122.8 MHZ. THIS FREQUENCY IS TO BE UTILIZED WHEN CROSSING ACTIVE FACILITIES. SUFFICIENT RADIOS SHALL BE ON SITE AND OPERATING AT ALL TIMES SO THAT INSTRUCTIONS OR COMMUNICATIONS MAY BE DISPATCHED TO ALL CREWS AND/OR EQUIPMENT WORKING IN AN ACTIVE AOA. THE CONTRACTOR WILL SUPPLY THE RESIDENT ENGINEER WITH TWO (2) HANDHELD RECHARGABLE PORTABLE AERONAUTICAL RADIOS, CAPABLE OF TRANSMITTING AND RECEIVING ON THE UNICOM FREQUENCY OF 122.8 MHZ, AT THE START OF THE PROJECT. THESE RADIOS WILL HAVE A MINIMUM OF 3 WATTS OF TRANSMITTING POWER, SIMILAR TO ICOM MODEL IC-3A. THESE RADIOS WILL BECOME PROPERTY OF THE VERMONT AGENCY OF TRANSPORTATION.



PROJECT NAME: **SPRINGFIELD AIR**
 PROJECT NUMBER: **04-3161**
 FILE NAME: hartness frn.dgn
 PROJECT LEADER: JBL
 DESIGNED BY: TPL
GENERAL NOTES
 PLOT DATE: 05/21/2003
 DRAWN BY: TPL
 CHECKED BY: JBL
 SHEET 2 OF 17

GENERAL NOTES (CONTINUED)

F. DEBRIS

DEBRIS, WASTE, AND LOOSE MATERIAL (INCLUDING DUST AND DIRT) CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEAR OR PROPELLERS, OR BEING INGESTED IN JET ENGINES, SHALL NOT BE ALLOWED ON ACTIVE AIRCRAFT MOVEMENT AREAS OR ADJACENT GRASSED AREAS. MATERIALS OBSERVED TO BE WITHIN THESE AREAS SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO HAVE A SWEEPING MACHINE AND OPERATOR ON SITE AND READY AT ALL TIMES DURING CONSTRUCTION ACTIVITY. WHERE TRAVEL ON OR ACROSS RUNWAYS, RAMP AREAS, TAXIWAYS, OR AIRCRAFT APRONS IS REQUIRED, THE CONTRACTOR SHALL PROVIDE ADEQUATE PERSONNEL AND EQUIPMENT TO KEEP SUCH SURFACES CLEAR OF DEBRIS.

G. FLAGGERS

IN ACCORDANCE WITH THE SPECIFICATIONS, THE CONTRACTOR SHALL AT HIS OWN EXPENSE, FURNISH FLAGMEN AS NECESSARY TO CONTROL HIS TRAFFIC (UNLESS OTHERWISE DIRECTED BY THE ENGINEER).

ALL CONTRACTOR VEHICLES THAT ARE REQUIRED TO CROSS ACTIVE RUNWAYS, RUNWAY SAFETY AREAS, TAXIWAYS AND APRONS SHALL DO SO UNDER THE DIRECT CONTROL OF A COMPETENT FLAGMEN. ALL AIRCRAFT TRAFFIC ON RUNWAYS, TAXIWAYS, AND APRONS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC. AT NO TIME SHALL THE CONTRACTOR'S VEHICLES OR PERSONNEL BE ALLOWED TO ENTER OR CROSS ACTIVE RUNWAYS OR CLEAR ZONES WITHOUT PROPER AUTHORIZATION.

H. MISCELLANEOUS

- (1) OPEN FLAME, WELDING OR TORCH CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS HAVE BEEN TAKEN AND THE PROCEDURE PREVIOUSLY APPROVED BY THE ENGINEER.
- (2) EQUIPMENT AND STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT RESULTING FROM AIRCRAFT JET BLAST OR WIND CONDITIONS IN EXCESS OF 10 KNOTS.
- (3) THE CONTRACTOR SHALL PROVIDE TIMBER CONSTRUCTION BARRICADES WITH FLASHING RED LIGHTS AS SHOWN ON THE DRAWINGS TO DELINEATE THE WORK AREAS WHEN CLOSED TO AIRPORT TRAFFIC. THE COST OF THESE BARRICADES SHALL NOT BE PAID DIRECTLY, BUT SHALL BE CONSIDERED INCIDENTAL TO OTHER ITEMS. OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIAL LOCATED IN THE AOA SHALL BE PROMINENTLY MARKED WITH ORANGE FLAGS AND LIGHTED BY APPROVED LIGHT UNITS DURING HOURS OF LIMITED VISIBILITY AND DARKNESS.
- (4) ALL MATERIALS AND EQUIPMENT WHEN NOT IN USE SHALL BE PLACED IN APPROVED AREAS WHERE THEY WILL NOT CONSTITUTE A HAZARD TO AIRCRAFT OPERATIONS AND NOT PENETRATE CLEARANCE SURFACES. EQUIPMENT SHALL BE PARKED AT THE STAGING AREA WHEN NOT IN USE.
- (5) MAXIMUM EQUIPMENT HEIGHT SHALL NOT EXCEED 15 FEET UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.
- (6) UPON COMPLETION OF ANY STAGE/PHASE OF WORK, THE ENGINEER WILL ARRANGE A PHYSICAL INSPECTION OF THE AREA WITH AIRPORT OPERATIONS PERSONNEL PRIOR TO OPENING ANY PORTION OF A RUNWAY, RAMP AREA OR AIRPORT ROADWAY THAT HAS BEEN CLOSED FOR WORK OR USED FOR A CROSSING POINT OR HALL ROUTE BY THE CONTRACTOR.
- (7) THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A CURRENT LIST OF ALL EMPLOYEES WORKING ON THE AIRPORT. THE LIST SHALL BE MAINTAINED CURRENT BY THE CONTRACTOR AND APPLIES TO ALL SUBCONTRACTORS.

(8) EXCEPT FOR EMERGENCIES, ALL CONTACT WITH AIRPORT PERSONNEL SHALL BE MADE THROUGH THE RESIDENT ENGINEER. FOR EMERGENCIES INVOLVING SAFETY (INJURIES, FIRES, SECURITY BREACHES, ETC.) THE CONTRACTOR SHALL MAKE DIRECT CONTACT WITH AIRPORT OPERATIONS FOLLOWED BY NOTIFICATION TO THE RESIDENT ENGINEER AS SOON AS POSSIBLE.

(9) THE CONTRACTOR SHALL PROVIDE THE PHONE NUMBERS OF THREE PERSONNEL, INCLUDING THE PROJECT SUPERINTENDENT WHO MAY BE CONTACTED IN AN EMERGENCY. PERSONNEL SHALL BE ON CALL 24 HOURS PER DAY FOR MAINTAINING AIRPORT HAZARD LIGHTING AND BARRICADES.

(10) IN ACCORDANCE WITH THE SPECIFICATIONS, FEDERAL WAGE RATES SHALL BE POSTED OUTSIDE THE SITE FIELD OFFICE IN A WEATHERPROOF ENCLOSURE.

I. UTILITIES

(1) UNDERGROUND UTILITIES: THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE CONSIDERED TO BE ONLY ESTIMATED LOCATIONS. ALL UTILITY LOCATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION. IN THE EVENT ANY UTILITY IS DAMAGED THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING FOR INCURRED COSTS OF REPAIRS.

(2) UTILITIES NOTIFICATION: AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER, AND THE OWNER OF EACH UNDERGROUND UTILITY FACILITY AFFECTED. THE CONTRACTOR SHALL ALSO NOTIFY DIGSAFE 1-888-344-7233 2 DAYS PRIOR TO COMMENCING CONSTRUCTION.

(3) THE FOLLOWING IS A LIST OF ENTITIES WITH POSSIBLE UTILITIES WITHIN THE CONSTRUCTION LIMITS.

CVPS (ELECTRIC)	1-800-649-2877
NOAA (ASOS SYSTEM)	1-802-862-8711 EXT. 238
(DAN FULLINGTON)	
TOWN OF SPRINGFIELD (WATER DEPARTMENT)	1-802-886-2208
(ALEX GREER, WATER SUPERINTENDENT)	
STATE OF VERMONT (AIRFIELD LIGHTING)	1-802-828-2587

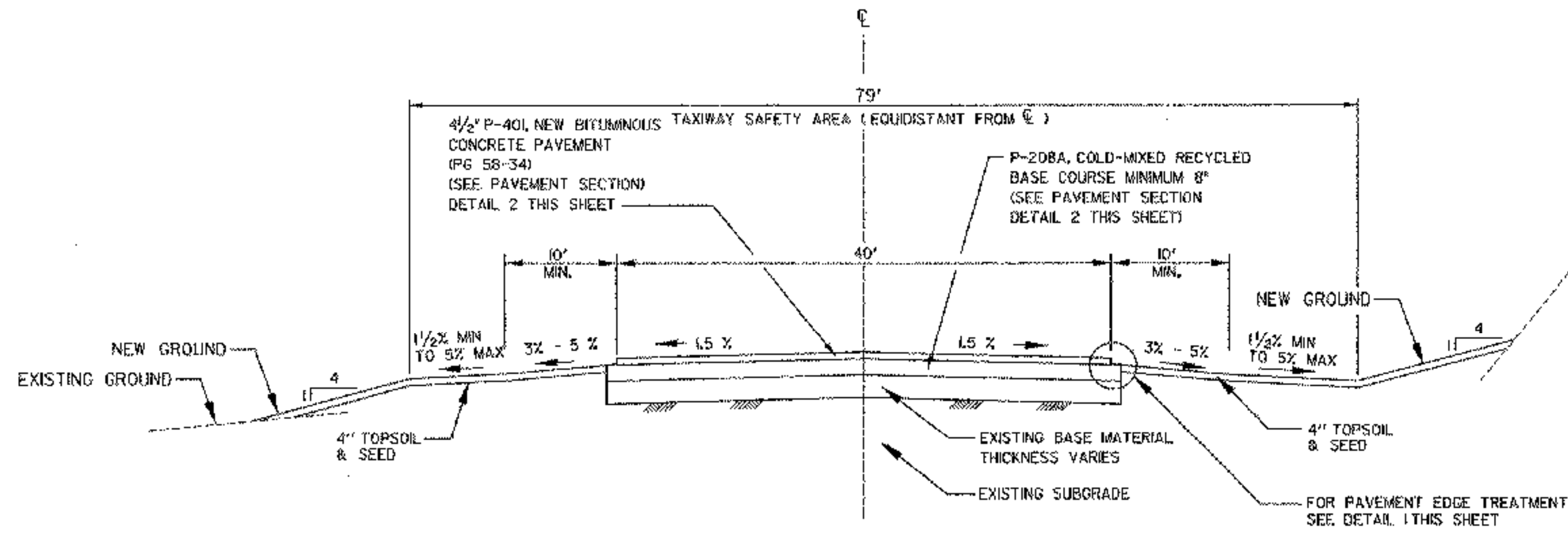
H. EROSION CONTROL

- (1) TEMPORARY TURF ESTABLISHMENT IS DEFINED IN THE SUPPLEMENTAL SPECIFICATION "SLOPE PROTECTION, SOIL EROSION AND SEDIMENT CONTROL". TEMPORARY TURF ESTABLISHMENT MUST BE COMPLETED WITHIN 24 HOURS ON DISTURBED AREAS. PERMENANT TURF ESTABLISHMENT AS DESCRIBED ON THE PLANS AND SPECIFICATIONS MUST BE COMPLETED AFTER PHASE 1A AND 111A.
- (2) AN ON-SITE COORDINATOR WILL BE IDENTIFIED AS DEFINED IN THE VTTRANS SECTION 652 EROSION CONTROL SPECIFICATION. THE VANR MUST BE NOTIFIED AS TO THIS INDIVIDUAL'S NAME, QUALIFICATIONS AND CONTACT PHONE NUMBER PRIOR TO WORK BEGINNING.
- (3) "CONSERVATION MIX IS SPECIFIED FOR TEMPORARY TURF ESTABLISHMENT HOWEVER, THE RESIDENT ENGINEER MAY DIRECT A SEED MIX THAT BETTER SUITS THE SITE'S SOIL CONDITIONS.
- (4) SEED MIX FOR TEMPORARY TURF ESTABLISHMENT IS PAID FOR UNDER ITEM 651.15 SEED (MOD.)

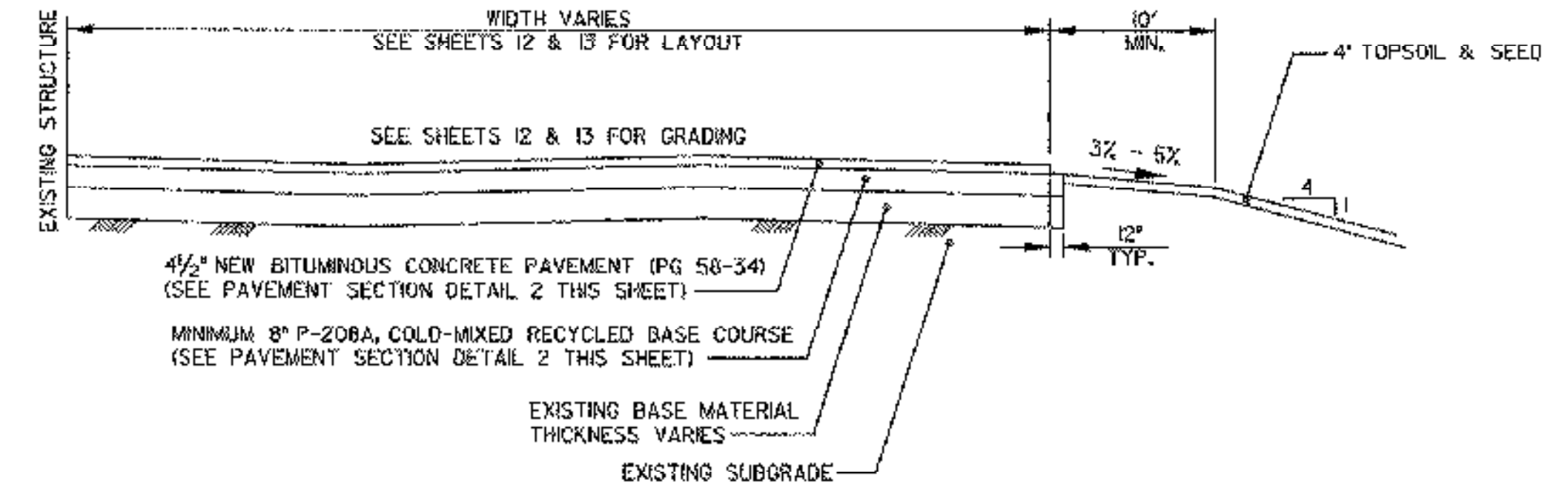


PROJECT NAME: SPRINGFIELD AIR
PROJECT NUMBER: 04-3161

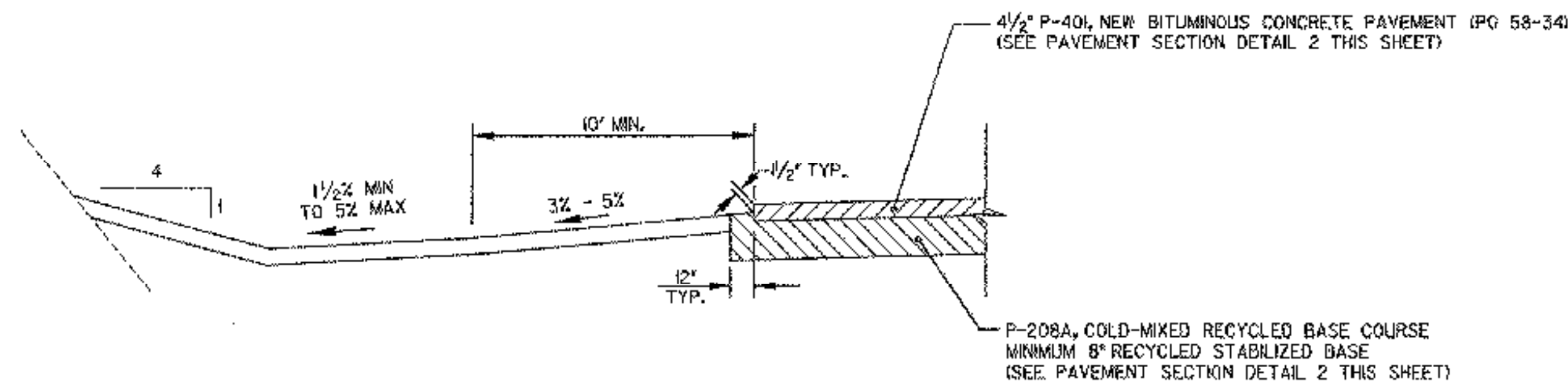
FILE NAME: hartness frn.dgn PLOT DATE: 05/21/2003
PROJECT LEADER: JBL DRAWN BY: TPL
DESIGNED BY: TPL CHECKED BY: JBL
GENERAL NOTES SHEET 3 OF 17



TYPICAL SECTION TAXIWAYS A & B
NOT TO SCALE

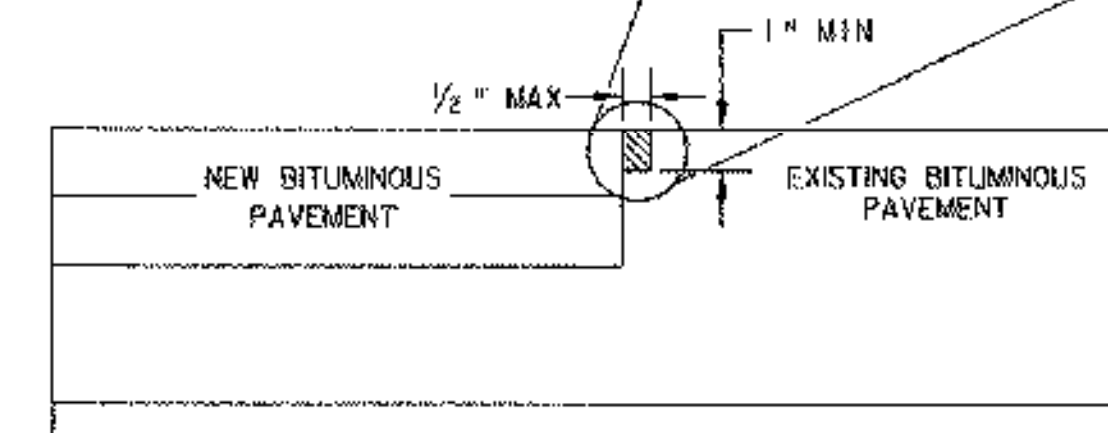
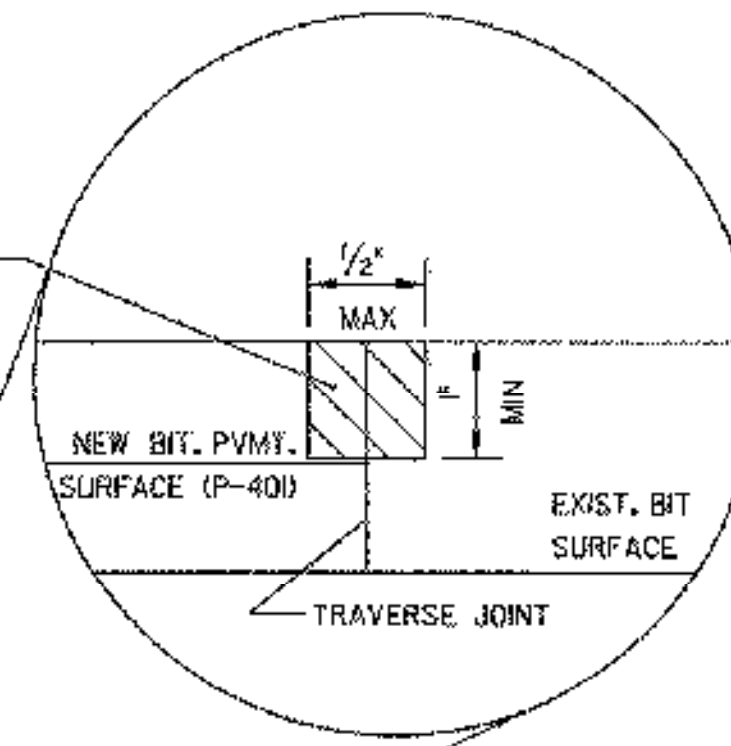


TYPICAL SECTION AIRCRAFT PARKING APRON
NOT TO SCALE



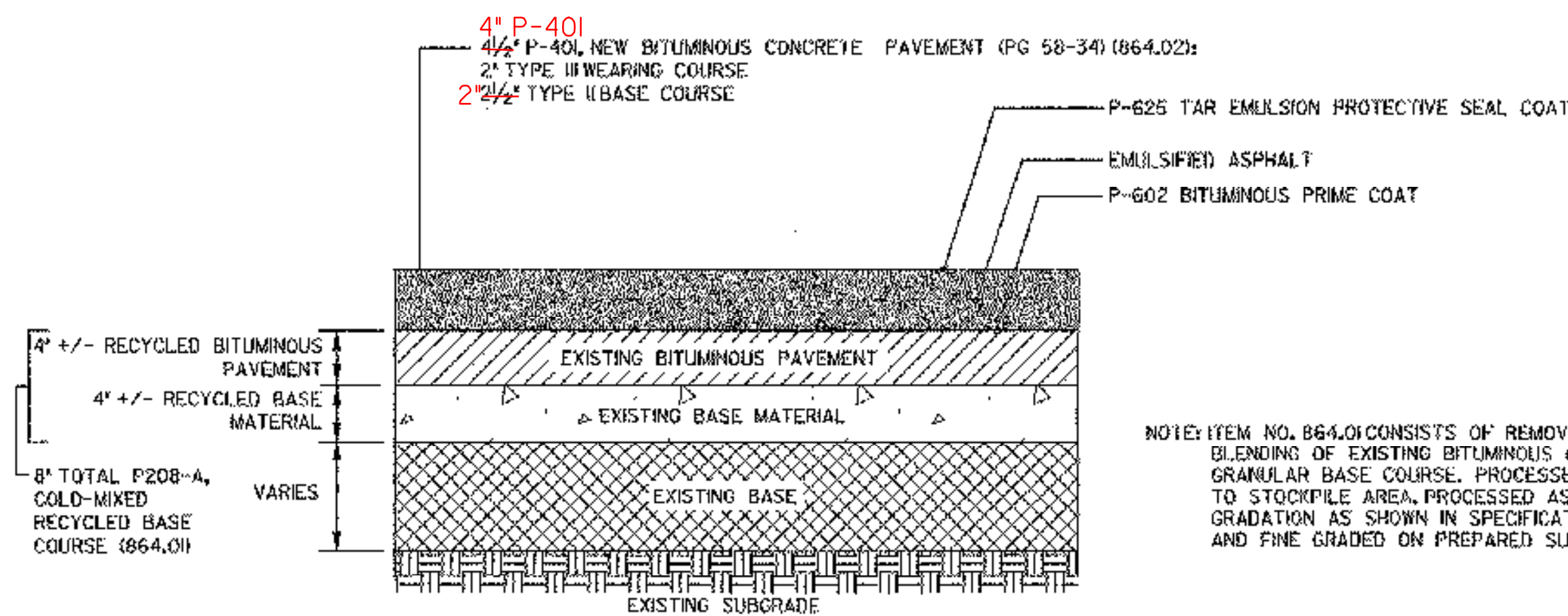
TYPICAL PAVEMENT EDGE TREATMENT FOR TAXIWAYS & APRON
NOT TO SCALE

AFTER PAVING SURFACE COURSE, RESAW JOINTS 1" DEEP (MIN.) x 1/2" WIDE (MAX.) AND APPLY JOINT SEALER, HOT POURED CONFORMING TO ASTM D-3405 PAY ITEM 524.1



NOTE: SEE SHEETS 12 & 13 FOR LOCATION.

TYPICAL BITUMINOUS JOINT DETAIL
NOT TO SCALE

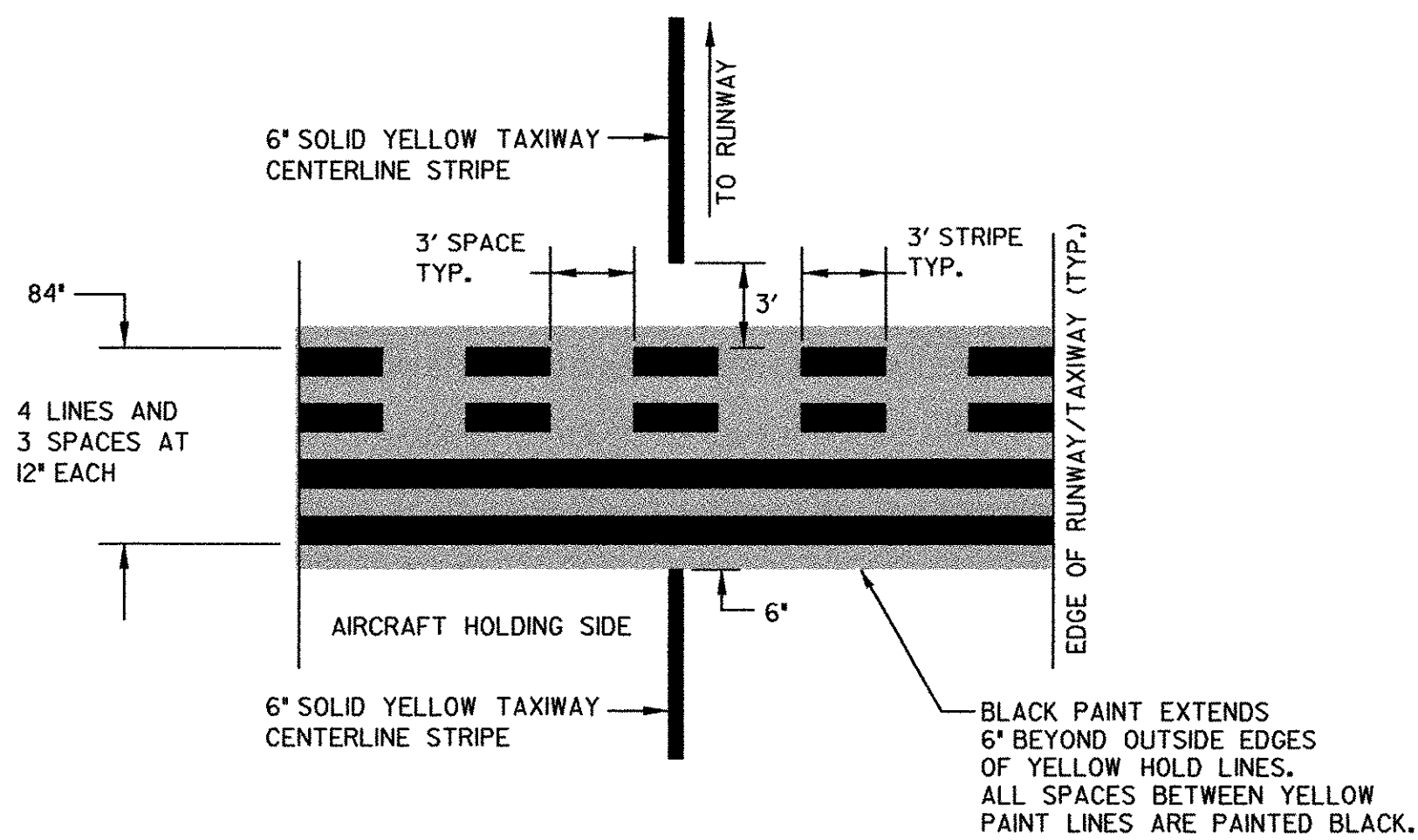


NOTE: ITEM NO. 864.01 CONSISTS OF REMOVAL, CRUSHING, PULVERIZING, BLENDING OF EXISTING BITUMINOUS CONCRETE PAVEMENT AND EXISTING GRANULAR BASE COURSE. PROCESSED BASE MATERIAL SHALL BE HAULED TO STOCKPILE AREA, PROCESSED AS NECESSARY TO MEET REQUIRED GRADATION AS SHOWN IN SPECIFICATIONS, PLACED, SPREAD, COMPACTED, AND FINE GRADED ON PREPARED SUBBASE COURSE AS SHOWN ON PLANS.

TYPICAL PAVEMENT SECTION
NOT TO SCALE



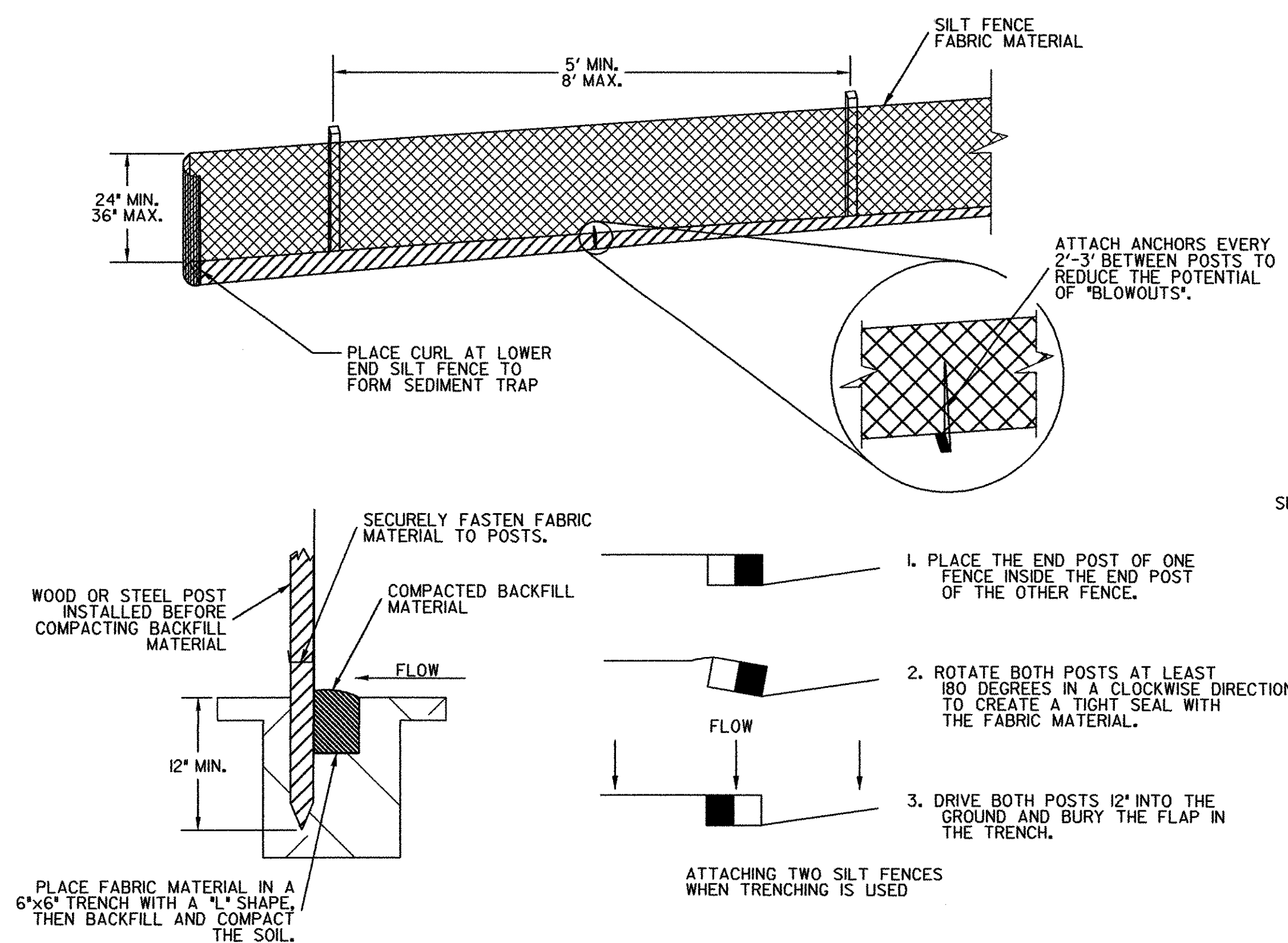
PROJECT NAME:	SPRINGFIELD AIR
PROJECT NUMBER:	04-3161
FILE NAME:	hartness frm.dgn
PROJECT LEADER:	JBL
DESIGNED BY:	TPL
APRON TYPICALS & DETAILS	CHECKED BY: JBL
	PLOT DATE: 05/21/2003
	DRAWN BY: TPL
	SHEET 4 OF 17



NOTE:
1. SEE SHEETS 10, 14 & 15 FOR LOCATIONS.

TYPICAL RUNWAY HOLDING POSITION MARKINGS
NOT TO SCALE

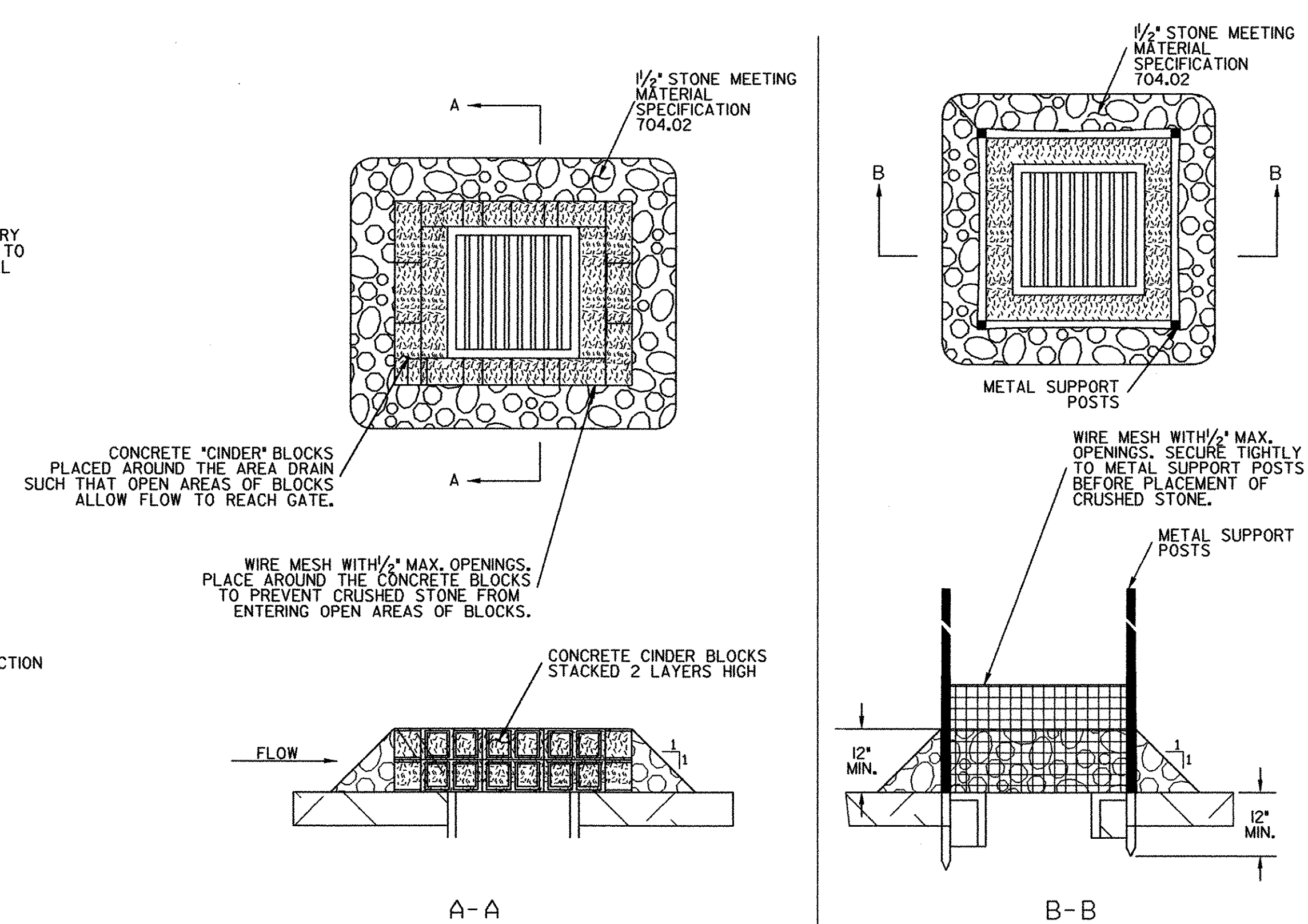
1
5



SILT FENCE

NOT TO SCALE

3
5

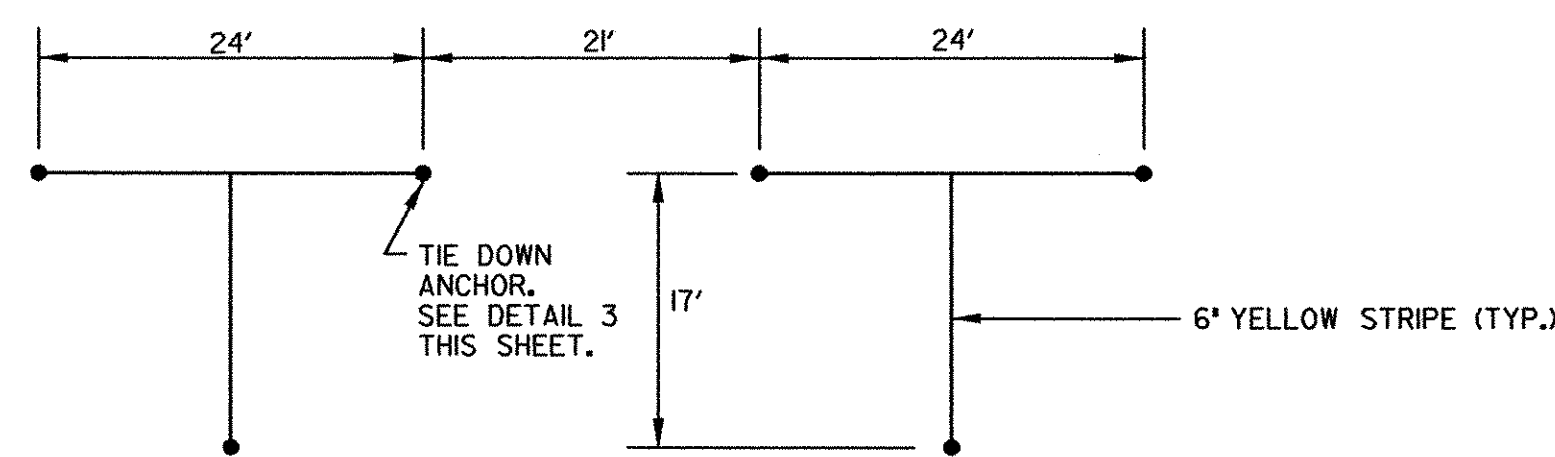


NOTE: CINDER BLOCKS, WIRE MESH, SUPPORT POSTS AND ANY OTHER MATERIALS REQUIRED TO PROTECT INLET ARE INCIDENTAL TO STONE.

ROCK BARRIER INLET PROTECTION

NOT TO SCALE

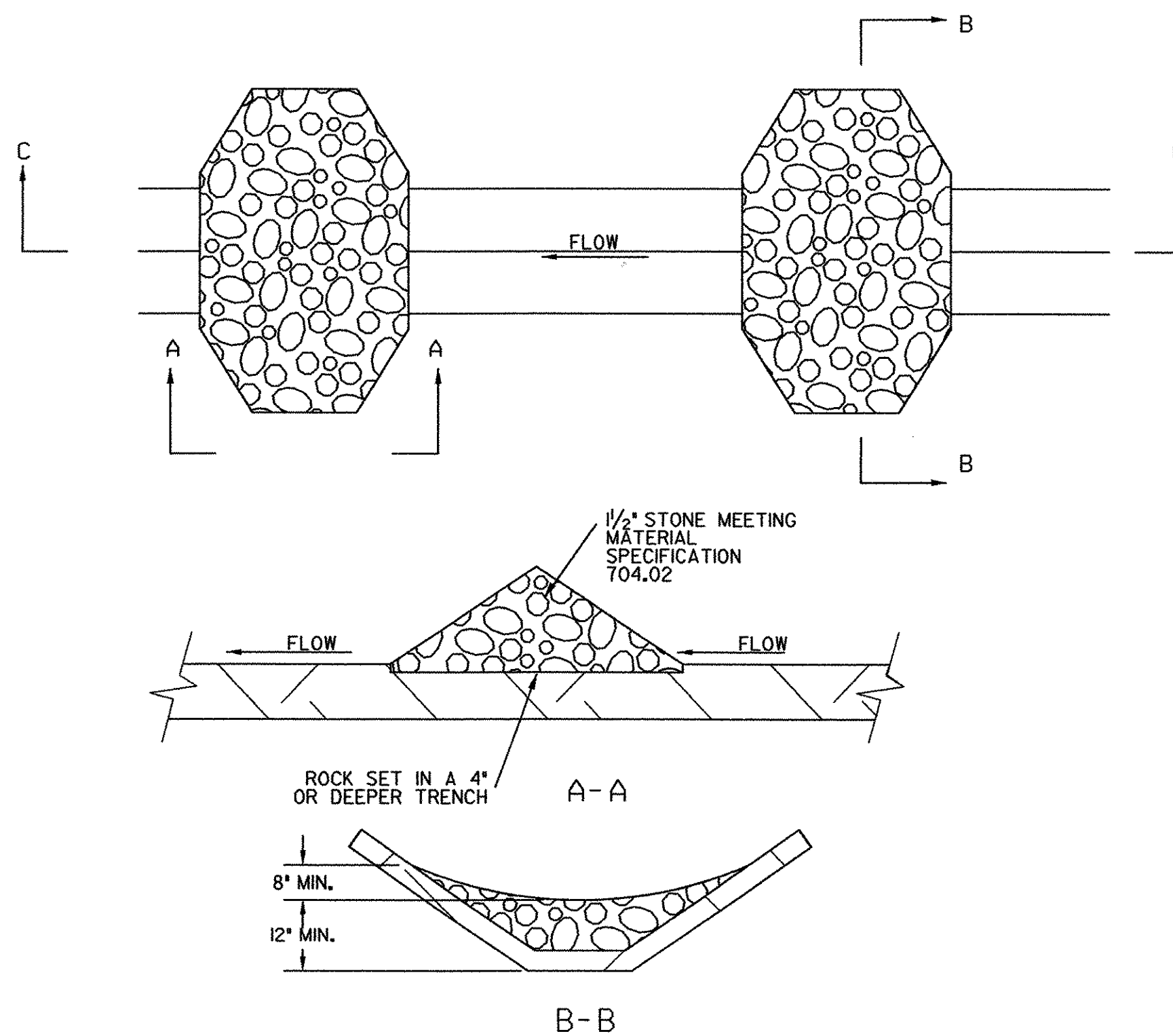
5
5



NOTE:
1. SEE SHEETS 14 & 15 FOR LOCATIONS.

AIRCRAFT TIE-DOWN MARKING DETAIL
NOT TO SCALE

2
5

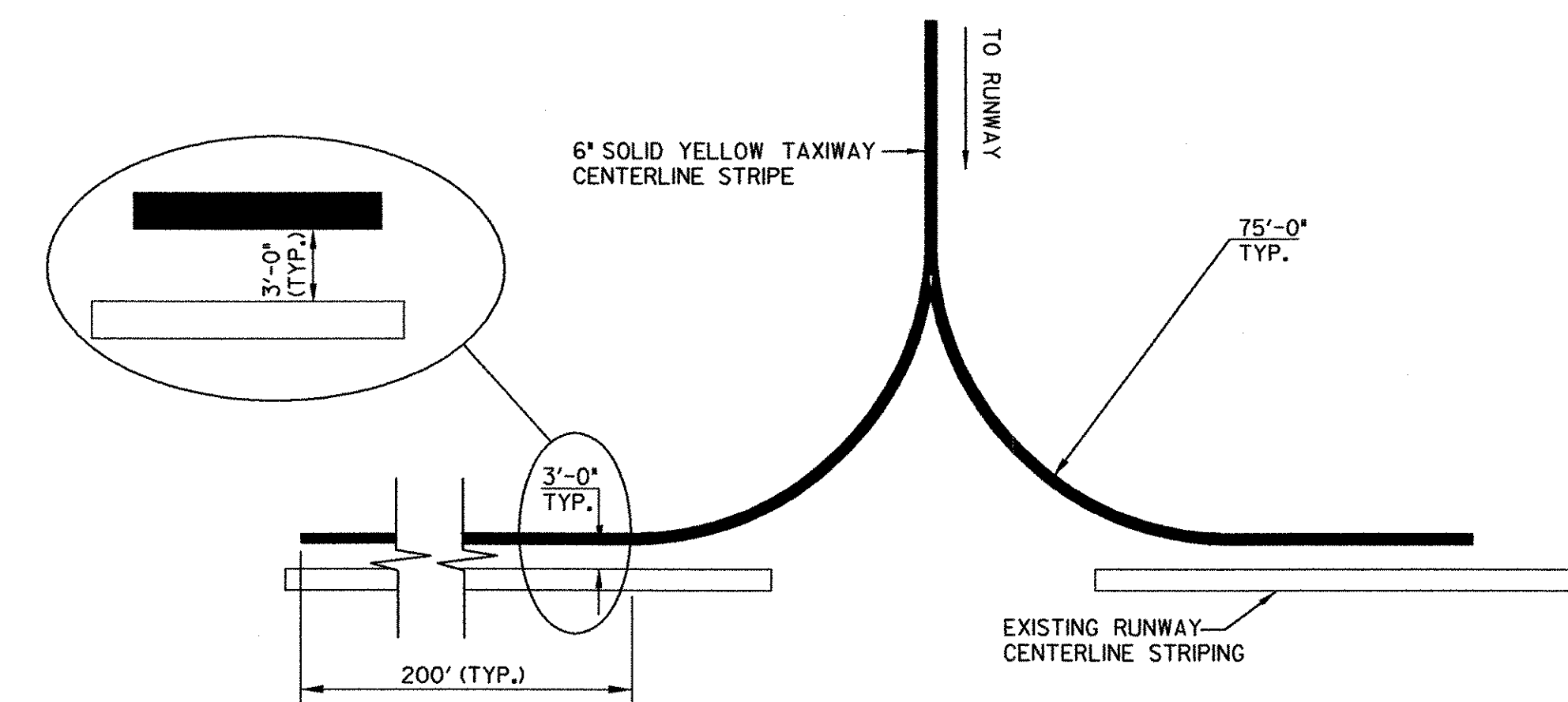


PLACE DOWNSTREAM STRUCTURE SUCH THAT TOP CENTER OF STRUCTURE IS APPROXIMATELY LEVEL WITH THE LOWEST GROUND ELEVATION OF THE UPSTREAM STRUCTURE

STONE CHECK DAM

NOT TO SCALE

4
5



NOTE:
1. SEE SHEETS 14 & 15 FOR LOCATIONS.

TAXIWAY/RUNWAY STRIPING DETAIL

NOT TO SCALE

6
5



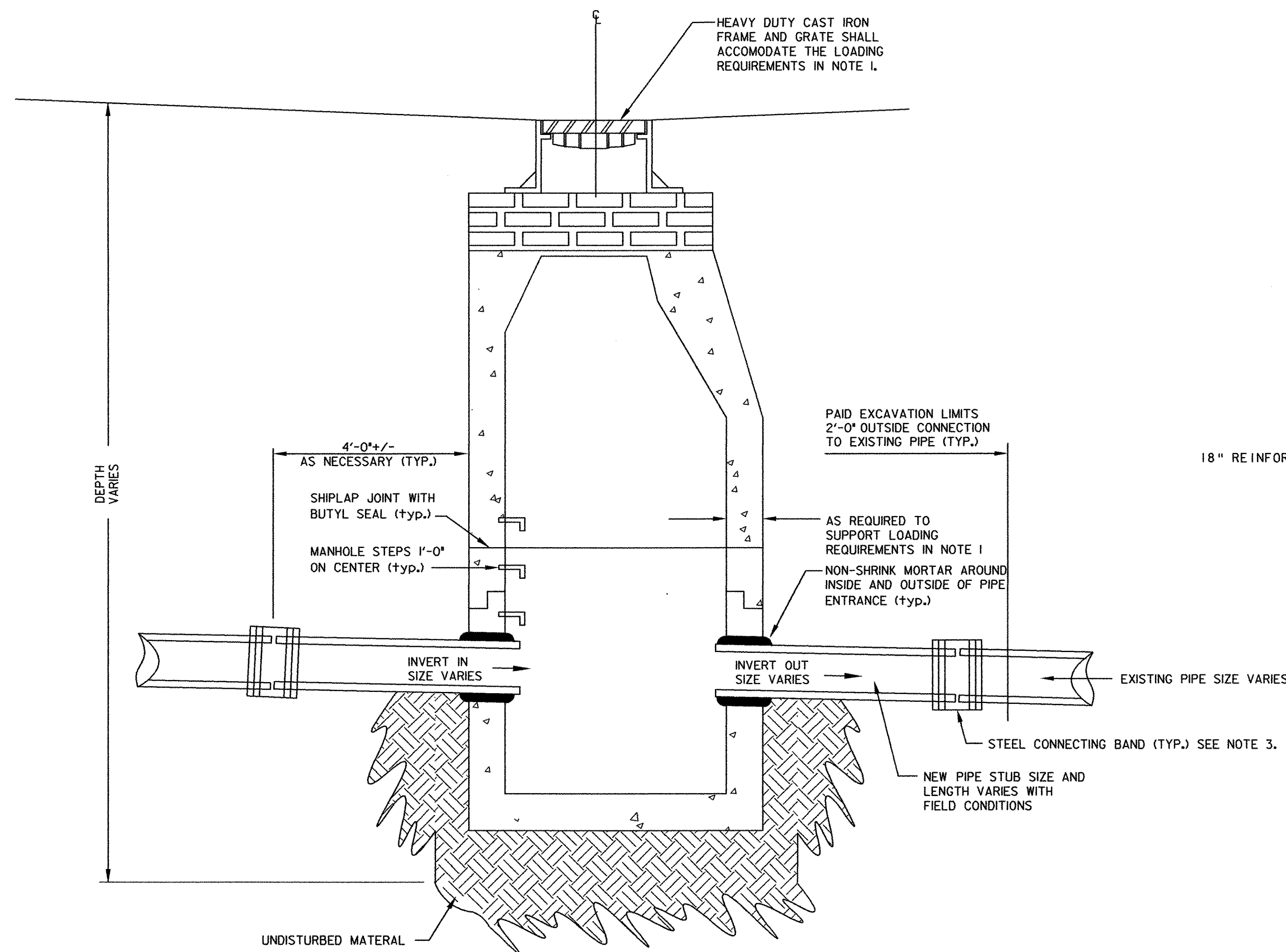
PROJECT NAME: SPRINGFIELD AIR
PROJECT NUMBER: 04-3161

FILE NAME: hartness frn.dgn
PROJECT LEADER: JBL
DESIGNED BY: TPL

PLOT DATE: 05/21/2003
DRAWN BY: TPL
CHECKED BY: JBL

EROSION AND STRIPING DETAILS

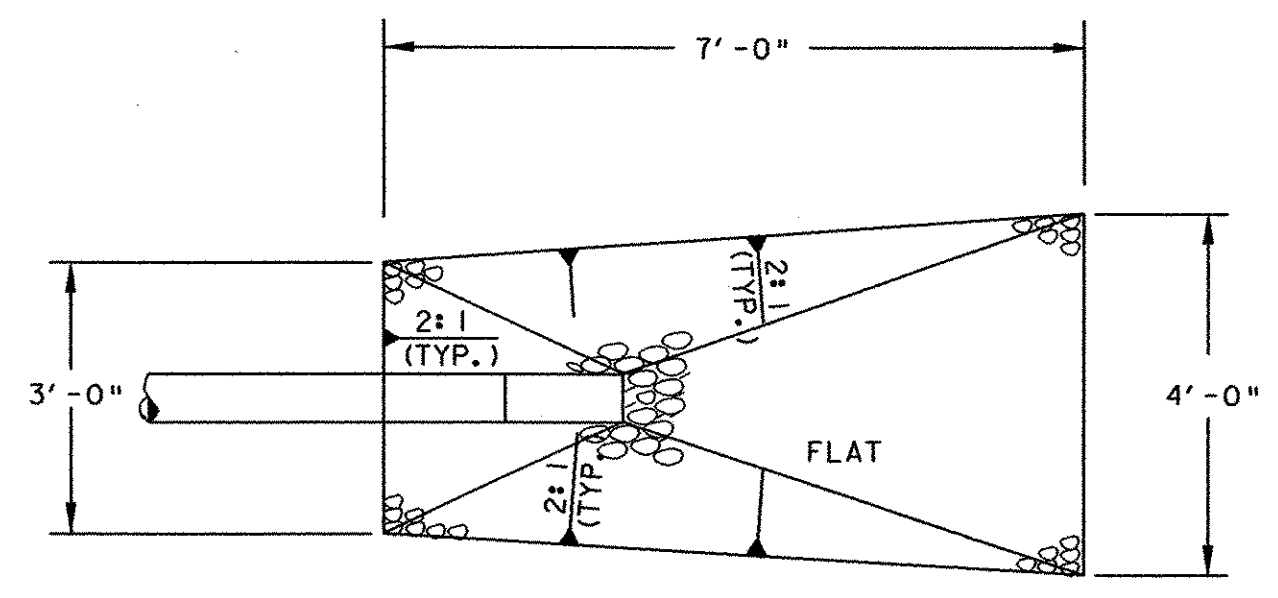
SHEET 5 OF 17



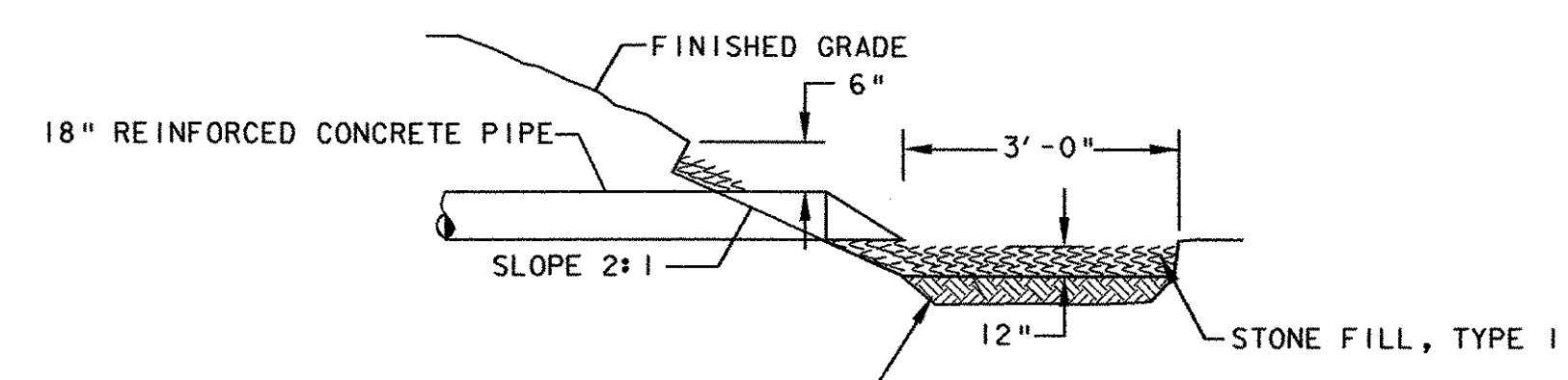
NOTES:

1. ALL CATCH BASINS SHALL BE PRE-CAST SQUARE OR ROUND AND DESIGNED AND REINFORCED TO SUPPORT H-20 LOADING.
2. THE CONTRACTOR SHALL SUPPLY SHOP DRAWINGS, CALCULATIONS, AND MANUFACTURERS CERTIFICATIONS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
3. CONTRACTOR SHALL EXCAVATE TO EXISTING PIPE, SAW CUT AND REMOVE PIPE TO ACCOMMODATE THE CATCH BASIN. THE EXISTING PIPE SHALL BE CONNECTED TO NEW PIPE WITH STEEL CONNECTING BANDS. MAINTAIN EXISTING PIPE'S LINE AND GRADE DURING CONSTRUCTION.
4. SEE VTRANS STD. D-15 FOR ADDITIONAL INFORMATION.
5. SEE SHEETS 12 & 13 FOR LOCATIONS.
6. BACKFILL MATERIAL SHALL MEET THE GRADING REQUIREMENTS OF T04.08A - GRANULAR BACKFILL FOR STRUCTURES.

CATCH BASIN ON EXISTING PIPE DETAIL (1/6)
NOT TO SCALE



PLAN



SECTION

OUTLET PROTECTION (2/6)
NOT TO SCALE

NOTE:
1. SEE SHEET 13 FOR LOCATION.

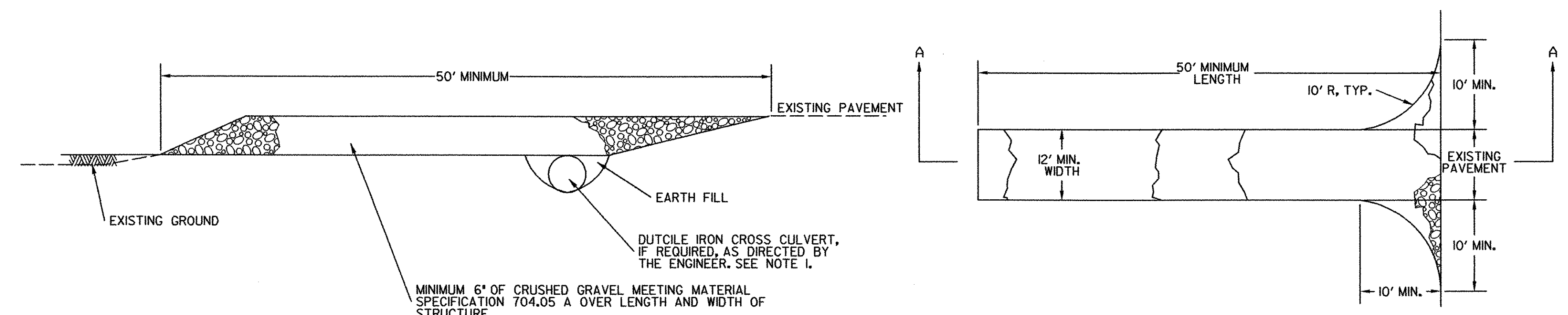
SEEDING FORMULA

% WT.	LBS./A.	NAME	PUR %	GERM %
37.5	22.5	CREeping RED FESCUE	98	85
37.5	22.5	TALL FESCUE	95	90
5.0	3.0	RED TOP	95	90
15.0	9.0	BIRDSFOOT TREFLOIL	98	85
5.0	3.0	ANNUAL RYEGRASS	95	85
100.0	60.0			

SEEDING NOTES

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER.
FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 500 LBS./ACRE. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).
AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.
HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.
TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

PERMANENT TURF ESTABLISHMENT (4/6)
NOT TO SCALE



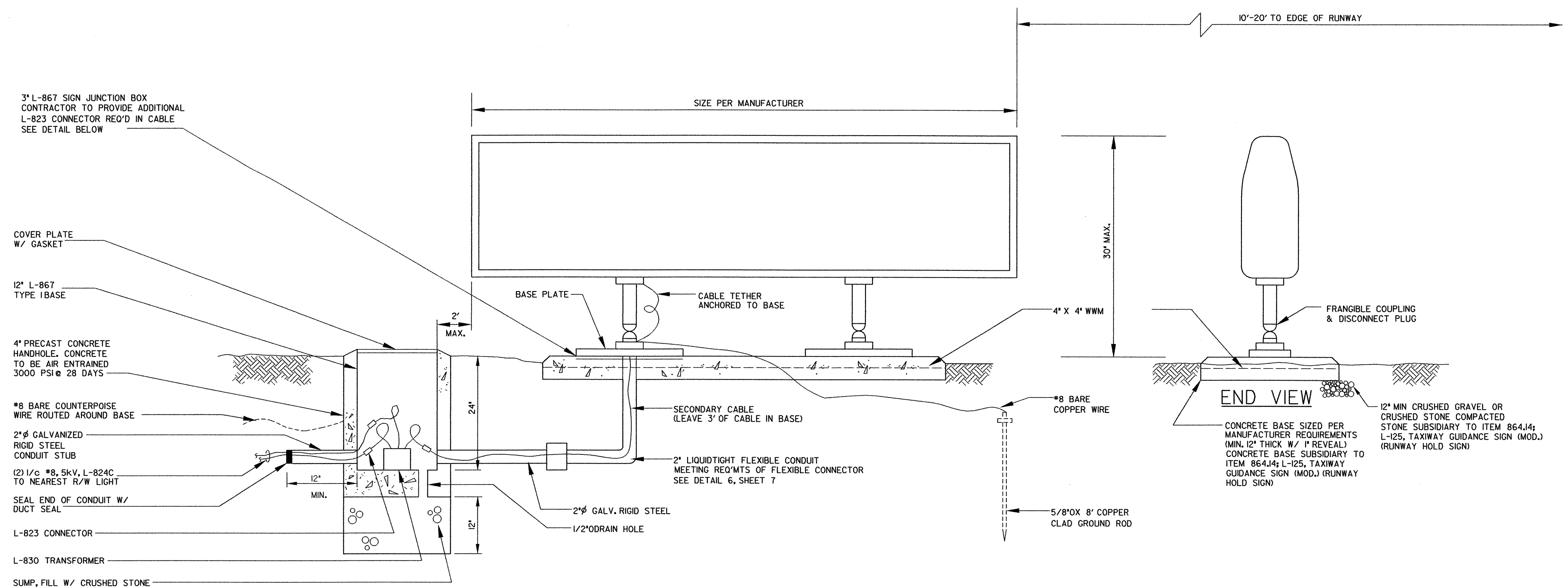
- NOTES:**
1. ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARDS TRACKING PADS SHALL BE PIPED UNDER THE PAD, MAINTAINING POSITIVE DRAINAGE. WHEN THE PAD IS LOCATED AT THE HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE WILL NOT BE NECESSARY. PIPE SHOULD BE SIZED ACCORDING TO THE AMOUNT OF RUNOFF TO BE CONVEYED, AS DIRECTED BY THE ENGINEER. A 8"0 MINIMUM SIZE WILL BE REQUIRED. CULVERT IS CONSIDERED INCIDENTAL TO VEHICLE TRACKING PAD.
 2. A VEHICLE TRACKING PAD SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE PAD.

VEHICLE TRACKING PAD (3/6)
NOT TO SCALE



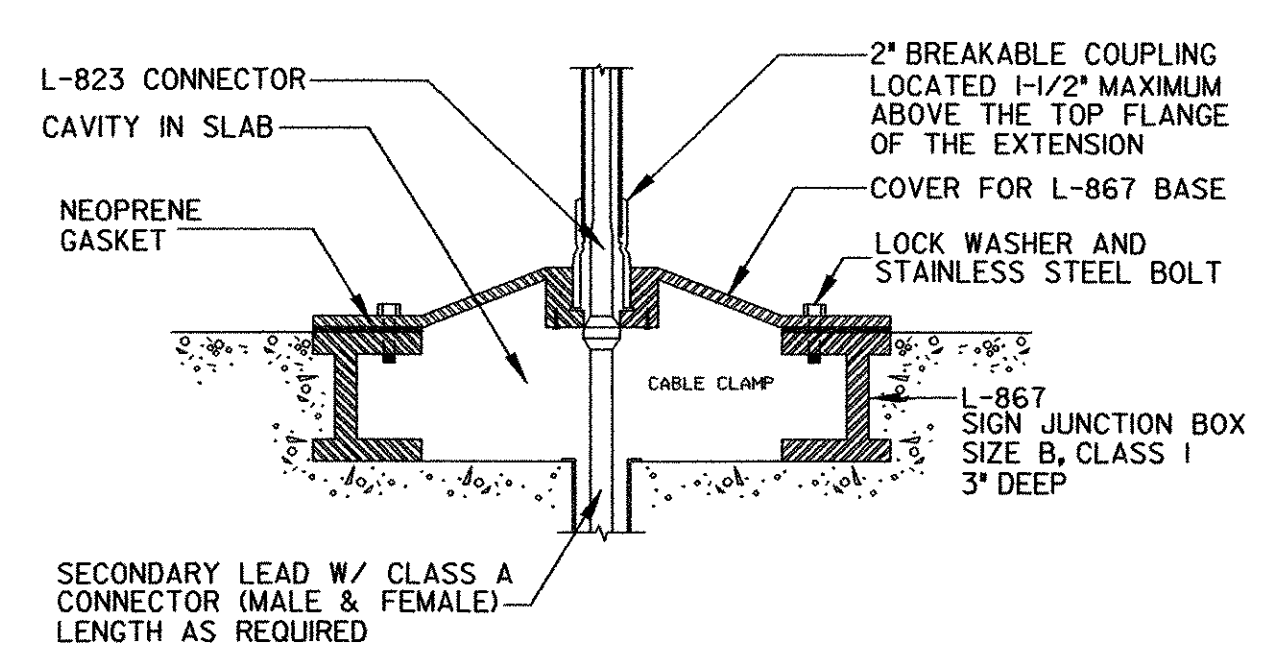
PROJECT NAME: SPRINGFIELD AIR
PROJECT NUMBER: 04-3161
FILE NAME: hartness frn.dgn
PROJECT LEADER: JBL
DESIGNED BY: TPL
DRAINAGE DETAILS

PLOT DATE: 05/21/2003
DRAWN BY: TPL
CHECKED BY: JBL
SHEET 6 OF 17



NOTES: 1. RUNWAY HOLD SIGNS SHALL BE FAA TYPE L-858R W/ WHITE LETTERS
ON RED BACKGROUND SIZE 1; CLASS 2; STYLE 2; LOW VA; HIGH POWER FACTOR
PAID FOR AS 864J4; L-125, TAXIWAY GUIDANCE SIGN (MOD.) (RUNWAY HOLD SIGN)
2. SEE SHEET 9 FOR LOCATIONS.
3. BACK SIDE OF SIGN IS A BLANK, BLACK PANEL
4. HANDHOLES AND JUNCTION BOXES ARE INCIDENTAL TO ITEM 864J4.

TAXIWAY GUIDANCE SIGN (MOD.)
NOT TO SCALE



NOTE:
1. SEE SHEET 9 FOR LOCATION.

SIGN JUNCTION BOX DETAIL
NOT TO SCALE

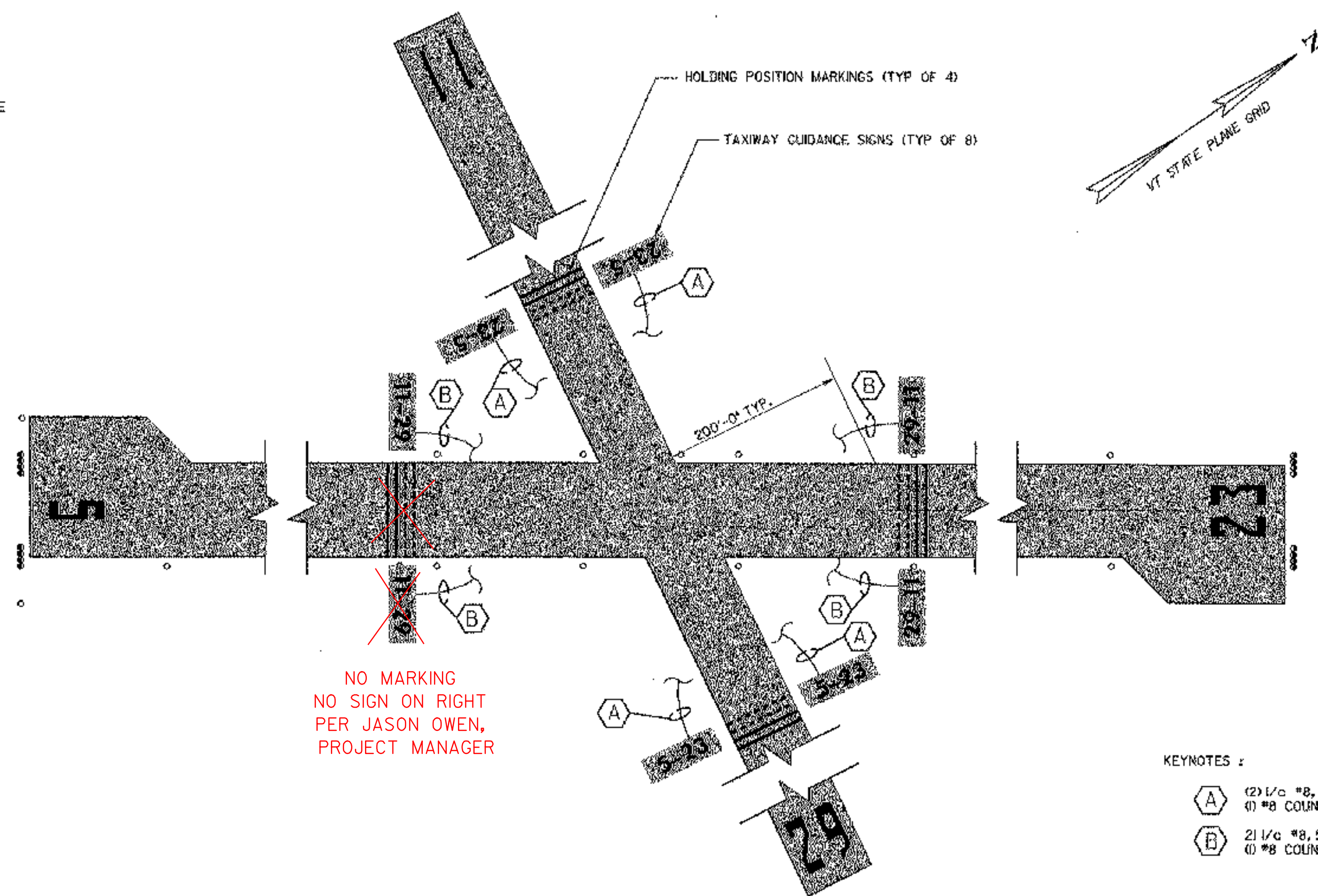
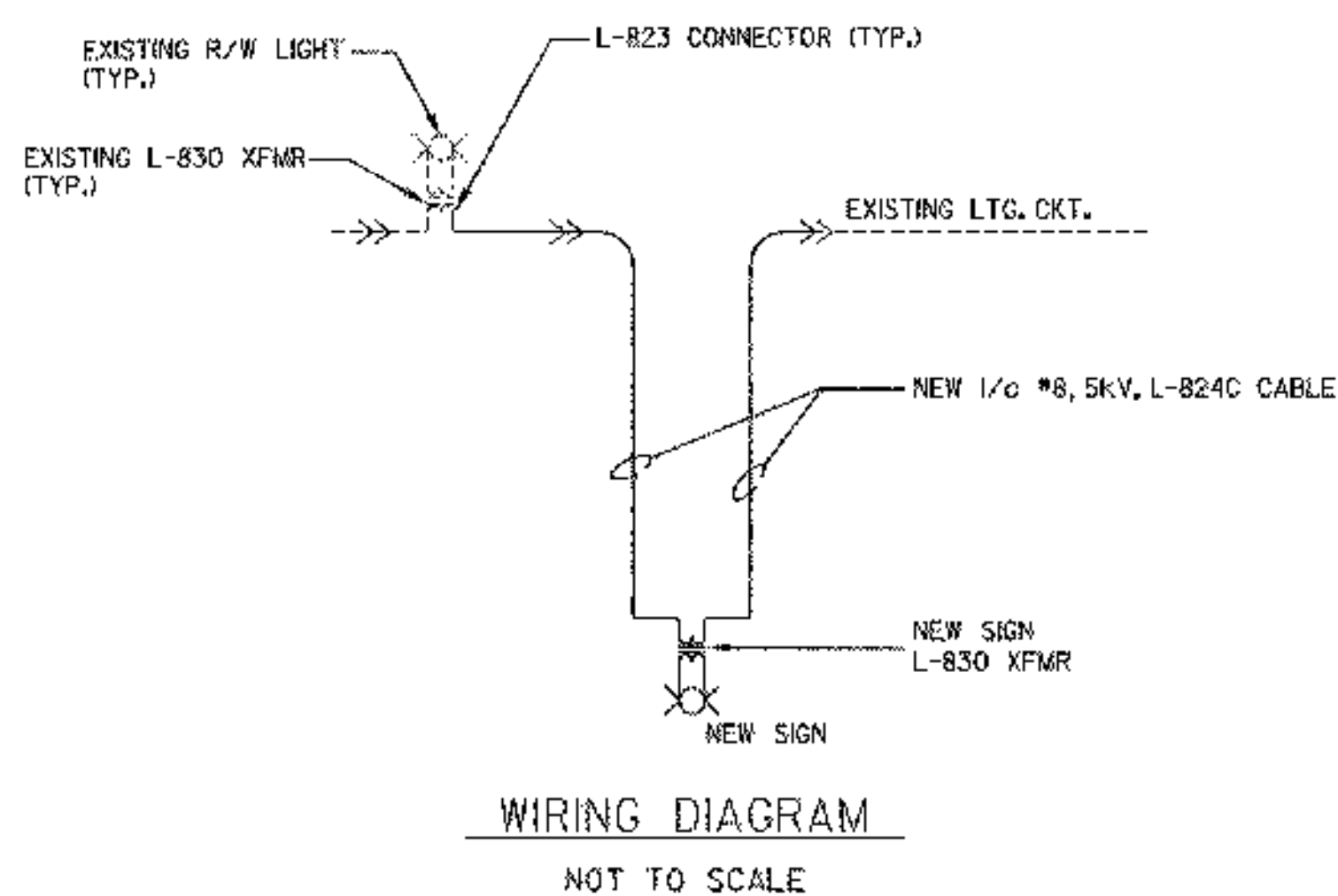
	PROJECT NAME: SPRINGFIELD AIR	
	PROJECT NUMBER: 04-3161	
	FILE NAME: hartness frn.dgn	PLOT DATE: 05/21/2003
	PROJECT LEADER: JBL	DRAWN BY: TPL
DESIGNED BY: TPL	CHECKED BY: JBL	
LIGHTED HOLD SIGN DETAIL	SHEET 8	OF 17

...:\watson\p10011105\040416.dwt 05/21/2003 10:47:14 AM

GENERAL NOTES :

- INTERCEPT EXISTING CIRCUIT INSIDE CLOSEST LIGHT BASE.
- CONNECT NEW CABLE TO EXISTING W/ L-823 CONNECTORS.
- SIGN WILL BE CONNECTED IN SERIES WITH RUNWAY LIGHT.
- SEE DETAIL 8, SHEET 7 FOR DIRECT BURIED CABLE TRENCH DETAIL.

- 1) HOLD LINE LOCATIONS:
PERPENDICULAR DISTANCE = 200' FROM RUNWAY CENTERLINE TO INTERSECTING RUNWAY CENTERLINE.
- 2) TAXIWAY GUIDANCE SIGN LOCATIONS:
PERPENDICULAR DISTANCE = 10'-20' FROM DEFINED RUNWAY EDGE TO NEAR SIDE OF SIGN.
- 3) SEE SHEET 8 FOR TAXIWAY GUIDANCE SIGN DETAIL.
- 4) SEE DETAIL DETAIL 4, SHEET 5 FOR TYPICAL RUNWAY HOLDING POSITION MARKINGS



NO MARKING
NO SIGN ON RIGHT
PER JASON OWEN,
PROJECT MANAGER

KEYNOTES :

- (A) 2 1/0 #8, 5kV, L-824C DIRECT BURIED CABLE AND (1) #8 COUNTERPOISE TO CLOSEST RUNWAY LIGHT ON RUNWAY 11 - 29
- (B) 2 1/0 #8, 5kV, L-824C DIRECT BURIED CABLE AND (1) #8 COUNTERPOISE TO CLOSEST RUNWAY LIGHT ON RUNWAY 5 - 23

RUNWAY INTERSECTION HOLD LINE AND TAXIWAY GUIDANCE SIGN LOCATIONS

NOT TO SCALE

1
9



PROJECT NAME: SPRINGFIELD AIR
PROJECT NUMBER: 04-3161

FILE NAME: hartness frm.dgn PLOT DATE: 05/21/2003
PROJECT LEADER: JBL DRAWN BY: MBL
DESIGNED BY: TPL CHECKED BY: JBL
RUNWAY HOLD LINE & HOLD SIGN LOCATIONS SHEET 9 OF 17

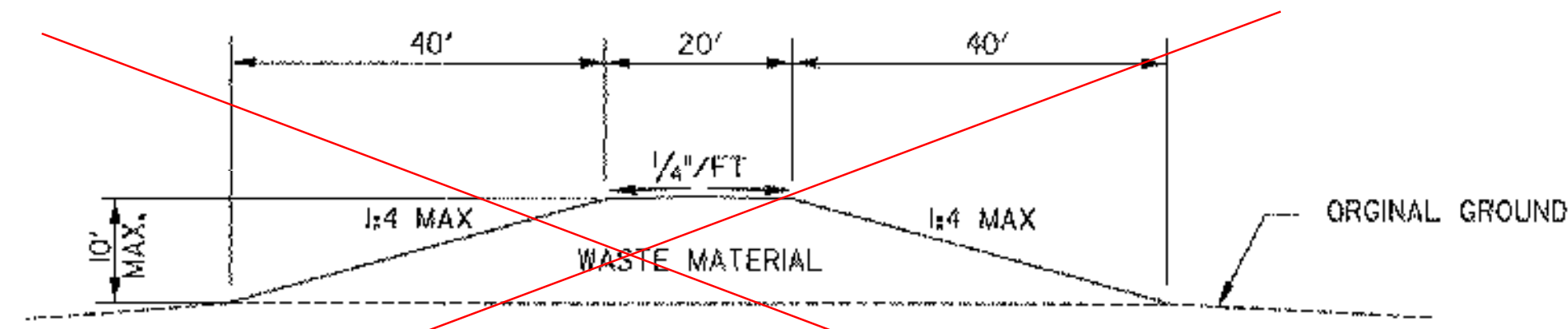
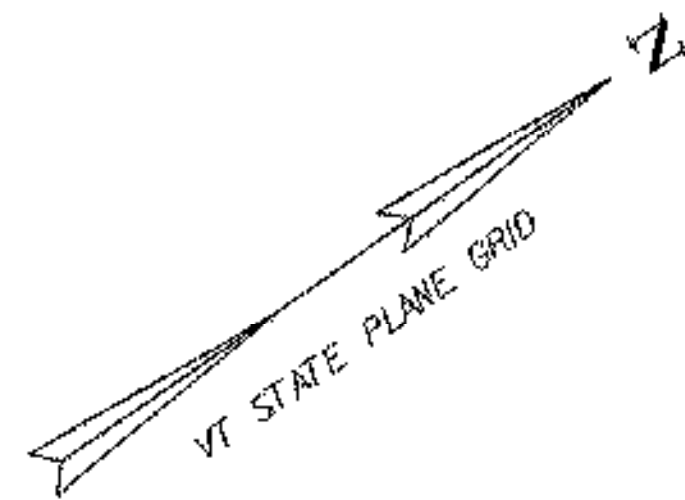
T.B.M. ELEV. 578.98
N.E. BOLT ON HYDRANT
BONNET

WASTE MATERIAL
DISPOSAL AREA. SEE
DETAIL THIS SHEET
(TOPSOIL AND SEED STOCKPILES
STORED LONGER THAN
24 HOURS)

TAXIWAY A

EXISTING 30 CM DIAMETER
MONUMENT W/SURVEY MARKER ON TOP

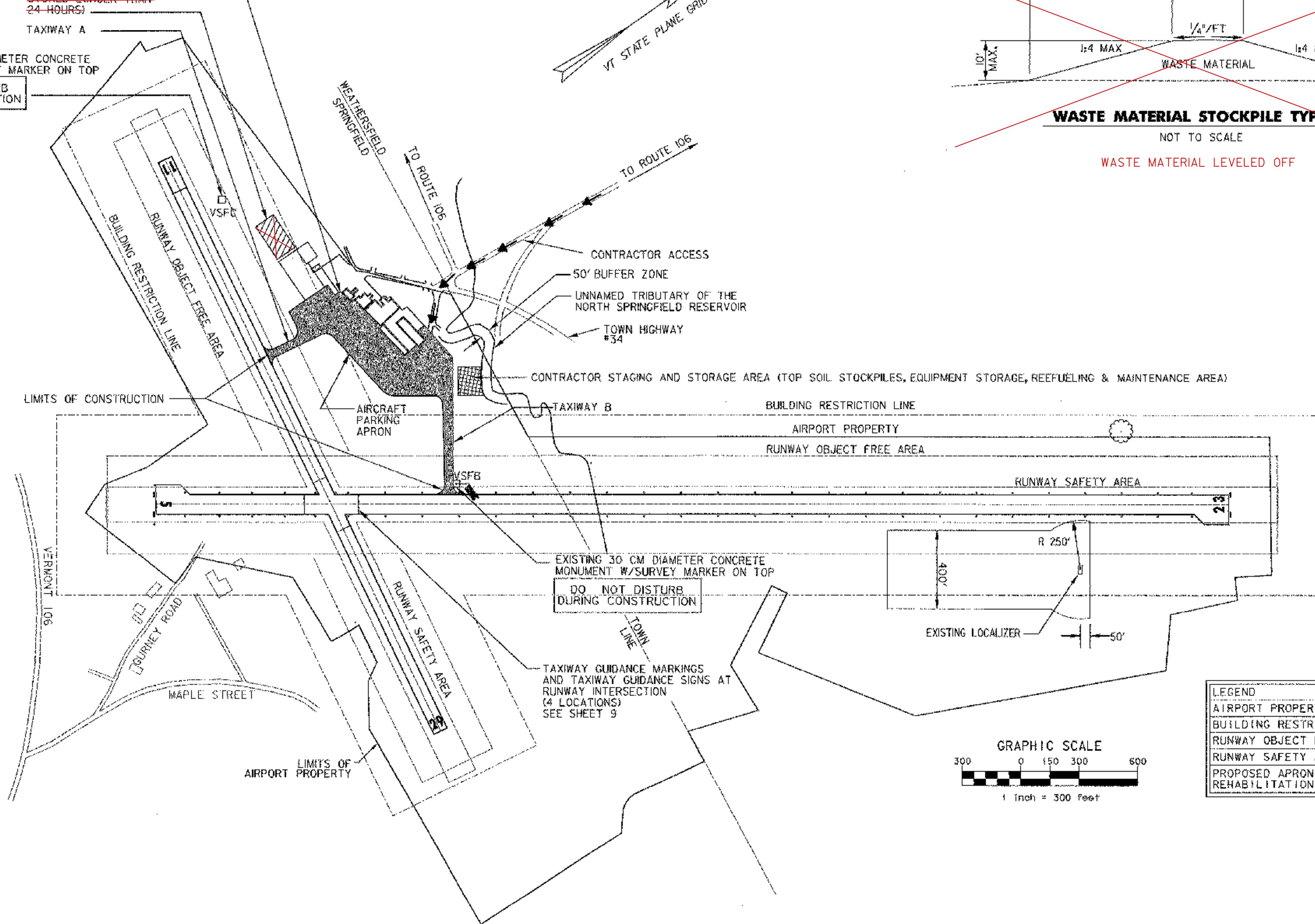
DO NOT DISTURB
DURING CONSTRUCTION



WASTE MATERIAL STOCKPILE TYPICAL

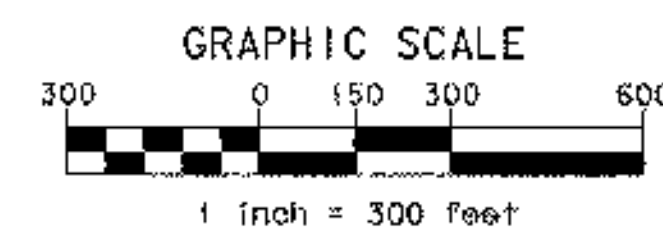
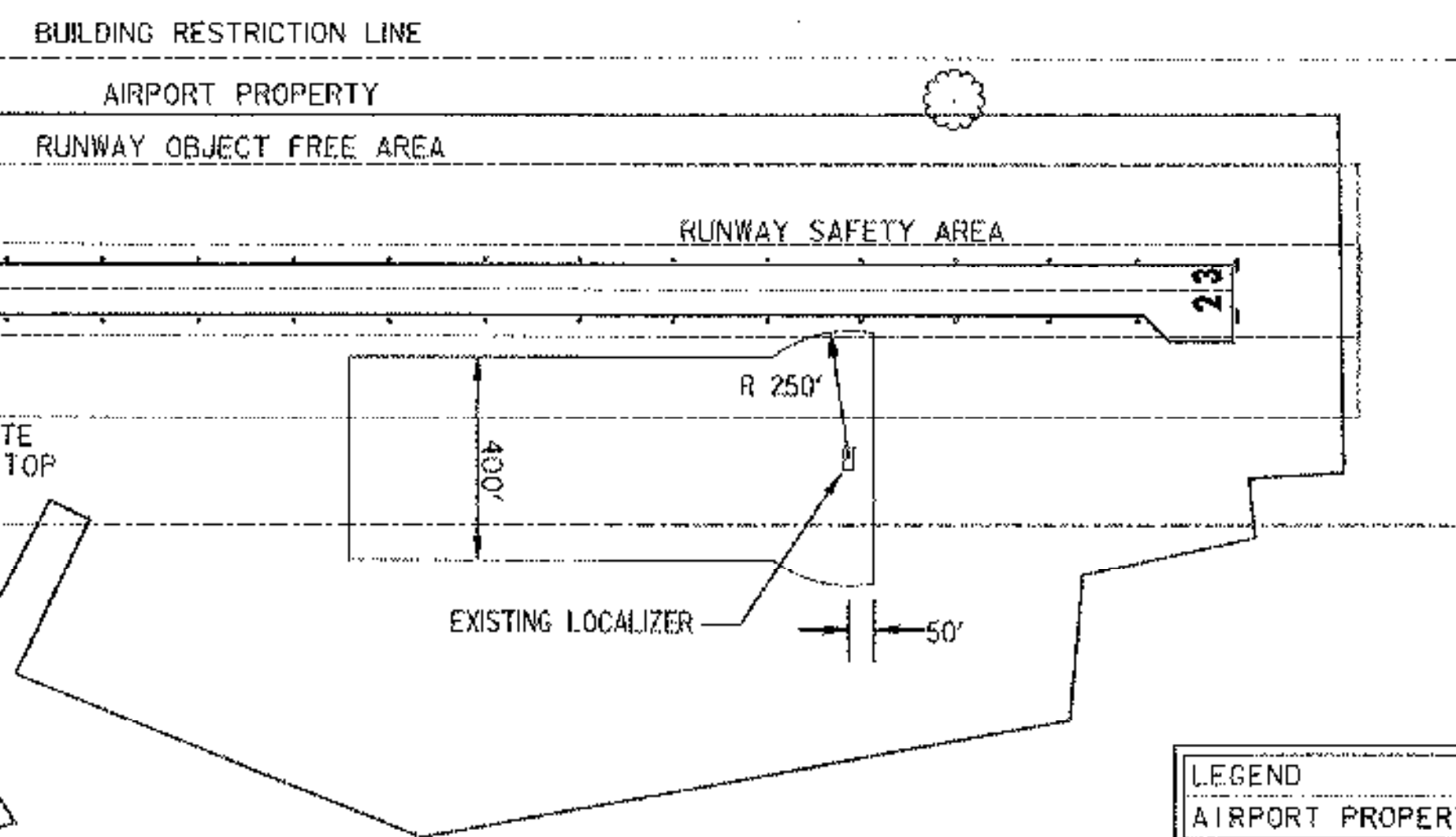
NOT TO SCALE

WASTE MATERIAL LEVELED OFF



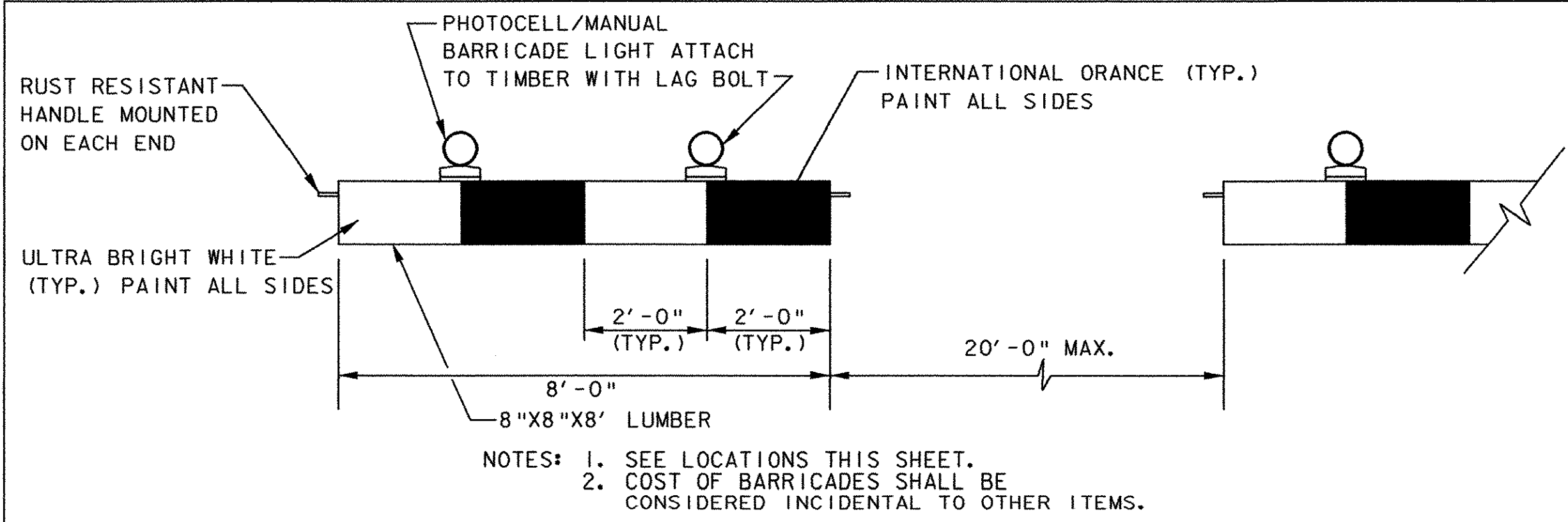
EXISTING 30 CM DIAMETER CONCRETE
MONUMENT W/SURVEY MARKER ON TOP
DO NOT DISTURB
DURING CONSTRUCTION

TAXIWAY GUIDANCE MARKINGS
AND TAXIWAY GUIDANCE SIGNS AT
RUNWAY INTERSECTION
(4 LOCATIONS)
SEE SHEET 9

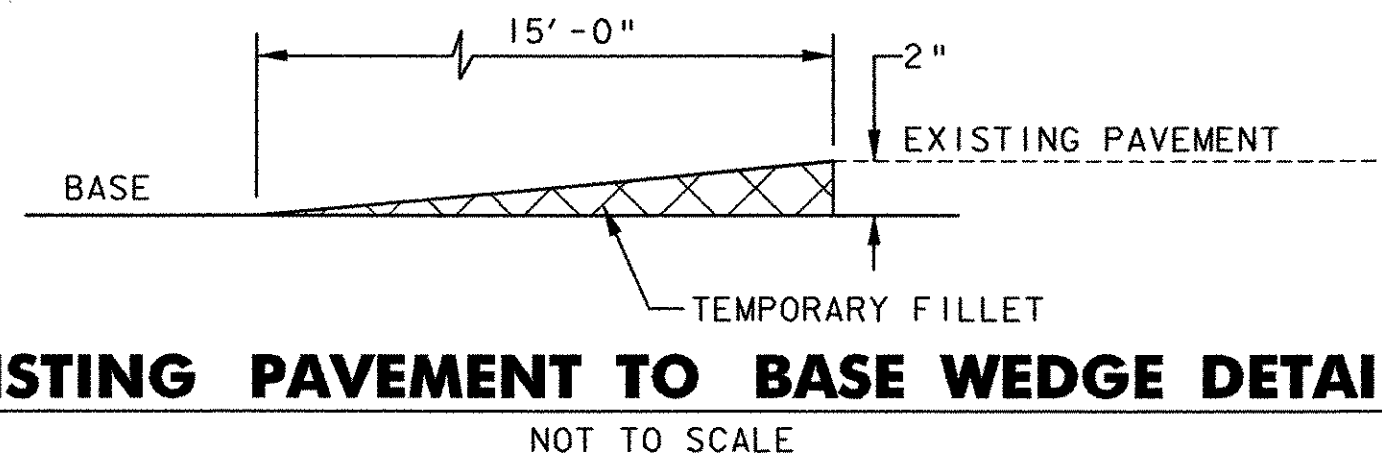


LEGEND	
AIRPORT PROPERTY	[Symbol]
BUILDING RESTRICTION LINE (BRL)	[Symbol]
RUNWAY OBJECT FREE AREA (OFA)	[Symbol]
RUNWAY SAFETY AREA (RSA)	[Symbol]
PROPOSED APRON AND TAXIWAY REHABILITATION AREA	[Symbol]

DH Dufresne-Henry	PROJECT NAME: HARTNESS APRON REHAB	PLOT DATE: 05/21/2003
	PROJECT NUMBER: 04-3161	DRAWN BY: TPL
	FILE NAME: overall.dgn	DESIGNED BY: MCS
	PROJECT WORK AREA PLAN	CHECKED BY: JBL
		SHEET 10 OF 17



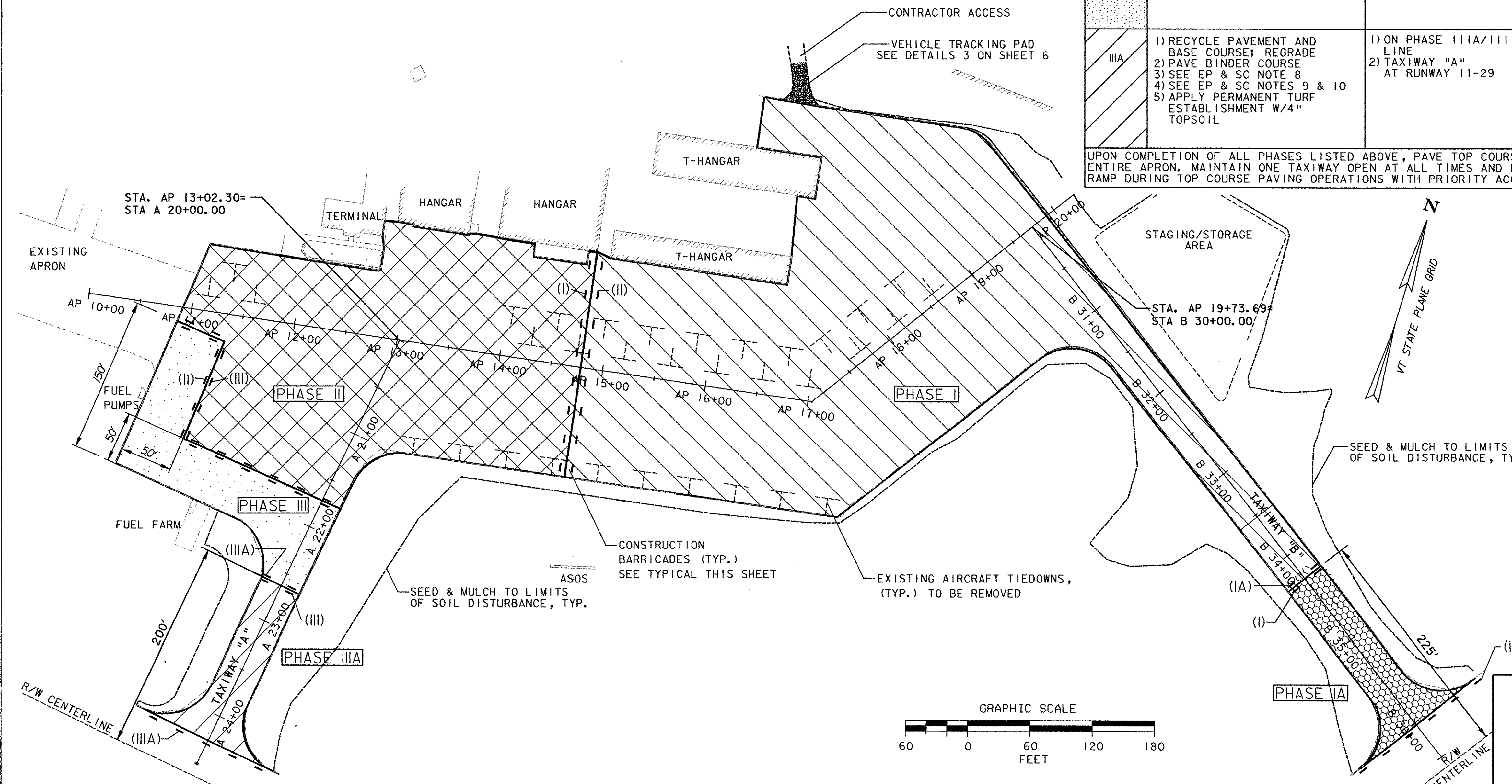
TYPICAL CONSTRUCTION BARRICADE
NOT TO SCALE



EXISTING PAVEMENT TO BASE WEDGE DETAIL
NOT TO SCALE

CONSTRUCTION PHASING					
PHASE	DESCRIPTION OF WORK	BARRICADE LOCATIONS	DURATION	COMMENTS	EROSION PREVENTION (EP) & SEDIMENT CONTROL (SC)
I	1) SEE EP & SC NOTES 1&2 2) REMOVE TIEDOWNS 3) RECYCLE PAVEMENT AND BASE COURSE; REGRADE SEE EP & SC NOTE 3 4) CONST. DRAINAGE 5) CONST. ELECTRICAL CONDUIT/ DUCT BANK 6) PAVE BINDER COURSE 7) INSTALL NEW TIEDOWNS	1) ON PHASE I/IA LINE 2) ACROSS APRON AT STA. 14+75+/- (PHASE I/II LINE)	45 CALENDAR DAYS	1) TAXIWAY "B" IS CLOSED 2) LIMITED ACCESS TO T-HANGARS 3) TAXIWAY "A" IS OPEN	1) INSTALL VEHICLE TRACKING PAD AS SHOWN ON SHEET 13. 2) INSTALL STONE CHECK DAMS AND SILT FENCE AS SHOWN ON SHEET 13, FOR PHASE I AND PHASE IA AREAS. 3) INSTALL ROCK BARRIER INLET PROTECTION IMMEDIATELY AFTER EXPOSING SUBBASE (FOR INLETS IN PAVED SECTIONS) OR IMMEDIATELY UPON COMPLETION OF INLET CONSTRUCTION (FOR NEW STRUCTURES). MAINTAIN ROCK BARRIER INLET PROTECTION UNTIL PERMANENT COVER (PAVEMENT OR GRASS) IS ESTABLISHED. 4) APPLY TEMP. TURF ESTAB. TO ALL DISTURBED AREAS WITHIN 24 HOURS TO LIMITS OF SOIL DISTURBANCE, FOR ALL PHASE I AND PHASE IA AREAS.
IA	1) RECYCLE PAVEMENT AND BASE COURSE; REGRADE 2) PAVE BINDER COURSE 3) SEE EP & SC NOTE 4 4) APPLY PERMANENT TURF ESTABLISHMENT W/4" TOPSOIL	1) ON PHASE I/IA LINE 2) TAXIWAY "B" AT RUNWAY 5-23	3 WORKING DAYS (72 HOURS)	1) TAXIWAY "A" IS OPEN 2) TAXIWAY "B" IS CLOSED 3) ACCESS TO ALL HANGARS IS NORMAL 4) RUNWAY 5-23 IS CLOSED	5) INSTALL SILT FENCE AS SHOWN ON SHEET 12 FOR PHASE II, PHASE III AND PHASE IIIA AREAS. 6) INSTALL ROCK BARRIER INLET PROTECTION IMMEDIATELY AFTER EXPOSING SUBBASE (FOR INLETS IN PAVED SECTIONS) OR IMMEDIATELY UPON COMPLETION OF INLET CONSTRUCTION (FOR NEW STRUCTURES). MAINTAIN ROCK BARRIER INLET PROTECTION UNTIL PERMANENT COVER (PAVEMENT OR GRASS) IS ESTABLISHED. 7) APPLY TEMP. TURF ESTAB. TO ALL DISTURBED AREAS WITHIN 24 HOURS TO LIMITS OF SOIL DISTURBANCE, FOR ALL PHASE II AND PHASE III AREAS. 8) APPLY TEMP. TURF ESTAB. TO ALL DISTURBED AREAS WITHIN 24 HOURS TO LIMITS OF SOIL DISTURBANCE, FOR ALL PHASE IIIA AREAS. 9) REMOVE VEHICLE TRACKING PAD. RESTORE ACCESS ROAD TO ORIGINAL SURFACE. TOPSOIL, SEED & MULCH ANY EXPOSED SOIL. 10) REMOVE ALL REMAINING TEMPORARY EP & CS MEASURES UPON PROJECT COMPLETION OF FINAL SITE STABILIZATION AS APPROVED BY THE ENGINEER, WHICHEVER OCCURS LAST, AND SEED AND MULCH ANY AREAS DISTURBED BY THE REMOVAL OF THE TEMPORARY MEASURES.
II	1) SEE EP & SC NOTE 5 2) REMOVE TIEDOWNS 3) RECYCLE PAVEMENT AND BASE COURSE; REGRADE SEE EP & SC NOTE 6 4) CONST. DRAINAGE 5) CONST. ELECTRICAL CONDUIT/ DUCT BANK 6) PAVE BINDER COURSE 7) INSTALL NEW TIEDOWNS	1) ACROSS RAMP AT STA. 14+75+/- (PHASE I/III LINE) 2) ON PHASE II/III LINE	45 CALENDAR DAYS	1) TAXIWAY "B" IS OPEN 2) TAXIWAY "A" IS OPEN 3) FOR FUEL AND MAINTENANCE HANGAR ONLY 4) LIMITED ACCESS TO OTHER HANGARS	
III	1) RECYCLE PAVEMENT AND BASE COURSE; REGRADE 2) PAVE BINDER COURSE 3) SEE EP & SC NOTE 7	1) ON PHASE IIIA/III LINE 2) PHASE II/III LINE	3 WORKING DAYS (72 HOURS)	1) TAXIWAY "A" IS CLOSED 2) TAXIWAY "B" IS OPEN 3) ACCESS TO ALL HANGARS IS NORMAL 4) LIMITED ACCESS TO FUEL	
IIIA	1) RECYCLE PAVEMENT AND BASE COURSE; REGRADE 2) PAVE BINDER COURSE 3) SEE EP & SC NOTE 8 4) SEE EP & SC NOTES 9 & 10 5) APPLY PERMANENT TURF ESTABLISHMENT W/4" TOPSOIL	1) ON PHASE IIIA/III LINE 2) TAXIWAY "A" AT RUNWAY 11-29	3 WORKING DAYS (72 HOURS)	1) TAXIWAY "A" IS CLOSED 2) TAXIWAY "B" IS OPEN 3) ACCESS TO ALL HANGARS IS NORMAL 4) RUNWAY 11-29 IS CLOSED	

UPON COMPLETION OF ALL PHASES LISTED ABOVE, PAVE TOP COURSE ON TAXIWAY "A", TAXIWAY "B", AND ENTIRE APRON. MAINTAIN ONE TAXIWAY OPEN AT ALL TIMES AND LIMITED, CONTROLLED TRAFFIC ON ENTIRE RAMP DURING TOP COURSE PAVING OPERATIONS WITH PRIORITY ACCESS TO FUEL PUMPS.



EROSION PREVENTION AND SEDIMENT CONTROL NOTES

- 1) REFERENCE SUPPLEMENTAL SPECIFICATION "SOIL EROSION AND SEDIMENT CONTROL" AND SPECIFICATION 652-EROSION CONTROL FOR INSPECTION AND MAINTENANCE REQUIREMENTS FOR EROSION PREVENTION AND SEDIMENT CONTROL MEASURES.
- 2) AN ON-SITE COORDINATOR WILL BE IDENTIFIED AS DEFINED IN THE VTRANS SECTION 652 EROSION CONTROL SPECIFICATION.
- 3) PHASING AS PROPOSED ON THIS PLAN DICTATED BY OPERATIONAL REQUIREMENTS DURING CONSTRUCTION ALTERATIONS FOR CONSTRUCTION PURPOSES MUST BE APPROVED BY AIRPORT MANAGER.

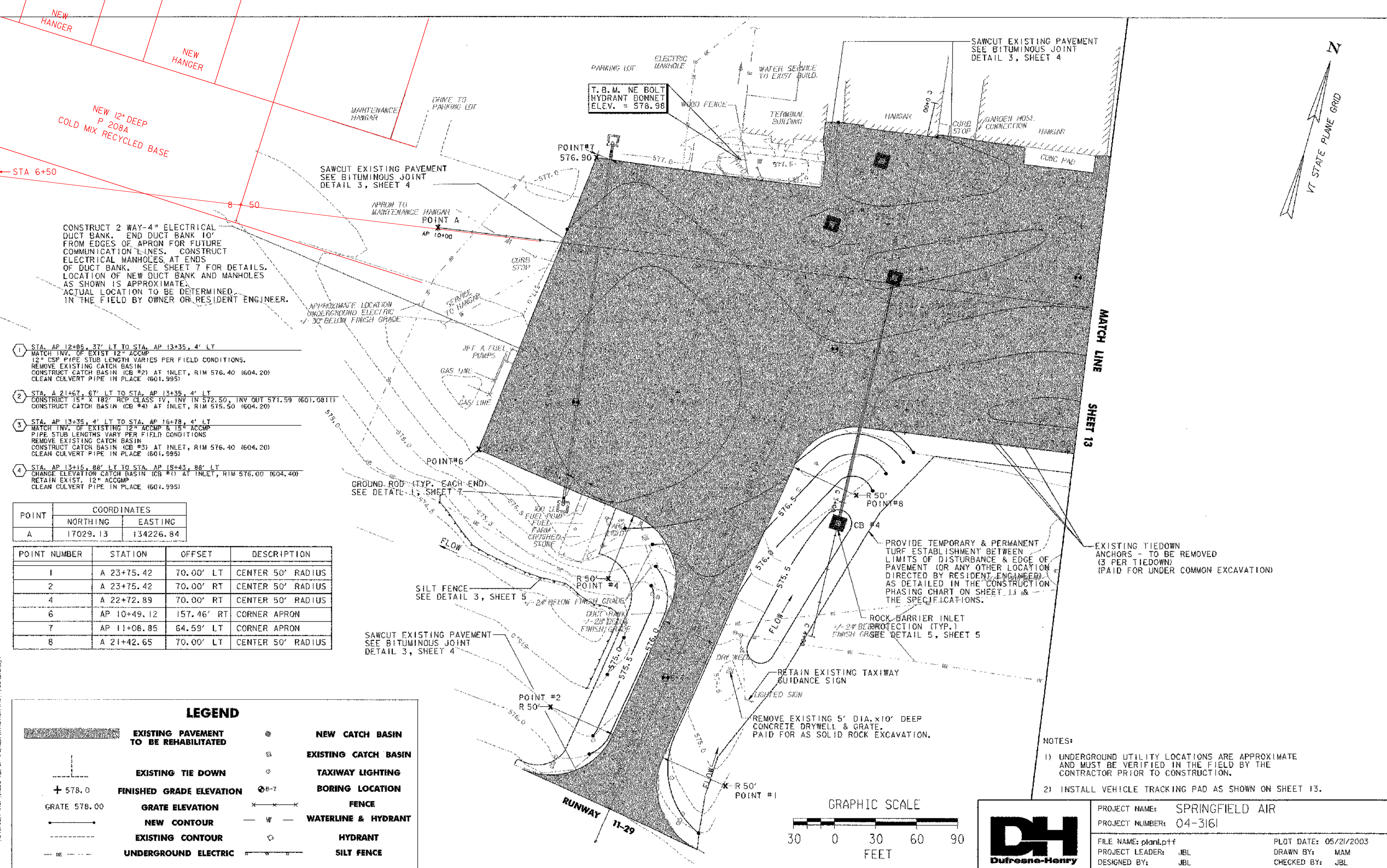
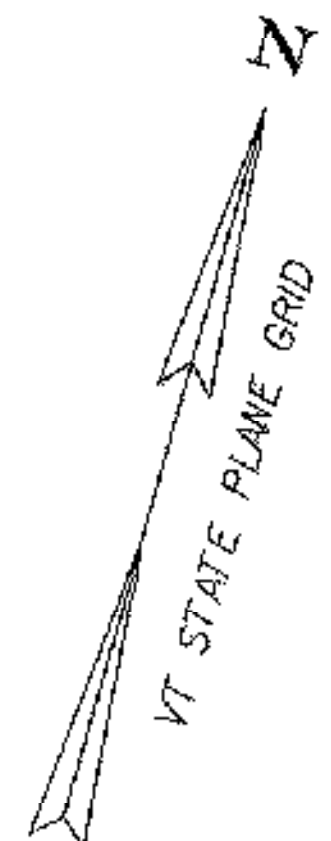
NOTES REGARDING RUNWAY CLOSURE FOR RUNWAY HOLD LINES AND SIGNS:

- 1) THE CONTRACTOR SHALL COORDINATE WITH THE HARTNESS AIRPORT MANAGER BEFORE COMMENCING WITH THE INSTALLATION OF THE TAXIWAY GUIDANCE SIGNS AND MARKINGS. VAOT PERSONNEL MAY BE AVAILABLE TO MONITOR AIR TRAFFIC DURING THIS WORK, WHICH WOULD ENABLE ONE RUNWAY TO REMAIN OPEN. IF VAOT PERSONNEL ARE NOT ABLE TO MONITOR AIR TRAFFIC, BOTH RUNWAYS WILL NEED TO BE CLOSED.
- 2) IF IT IS NECESSARY TO CLOSE BOTH RUNWAYS TO COMPLETE THIS WORK, THE FOLLOWING CONDITIONS SHALL APPLY:
 - THIS WORK SHALL BE COMPLETED DURING PHASES IA OR IIIA.
 - THE CLOSURE TIME FOR BOTH RUNWAYS SHALL NOT EXCEED 3 WORKING DAYS.
 - THE CLOSURE OF BOTH RUNWAYS SHALL NOT OCCUR ON A WEEKEND.

CONSTRUCTION PHASING NOTES

PRIOR TO BEGINNING EACH PHASE OF WORK, THE CONTRACTOR SHALL REQUEST THAT THE AIRPORT ISSUE A NOTAM TO CLOSE THE APPROPRIATE SECTION OF THE AIRFIELD. ONCE THE WORK AREA HAS BEEN CLOSED TO AIR TRAFFIC, THE CONTRACTOR SHALL INSTALL CONSTRUCTION BARRICADES AS INDICATED ON THE PHASING PLAN. UPON COMPLETION OF CONSTRUCTION ACTIVITIES WITHIN EACH PHASE, THE BARRICADES SHALL BE REMOVED, THE WORK AREA SHALL BE INSPECTED AND ACCEPTED BY THE ENGINEER, AND THE NOTAM CANCELED PRIOR TO COMMENCING THE NEXT PHASE.

	PROJECT NAME: SPRINGFIELD AIR	PLOT DATE: 05/21/2003
	PROJECT NUMBER: 04-3161	DRAWN BY: TPL
	FILE NAME: phase.dgn	CHECKED BY: MCS
	PROJECT LEADER: JBL DESIGNED BY: MCS	SHEET 11 OF 17



CONSTRUCT 2 WAY-4" ELECTRICAL DUCT BANK. END DUCT BANK 10' FROM EDGES OF APRON FOR FUTURE COMMUNICATION LINES. CONSTRUCT ELECTRICAL MANHOLES AT ENDS OF DUCT BANK. SEE SHEET 7 FOR DETAILS. LOCATION OF NEW DUCT BANK AND MANHOLES AS SHOWN IS APPROXIMATE. ACTUAL LOCATION TO BE DETERMINED IN THE FIELD BY OWNER OR RESIDENT ENGINEER.

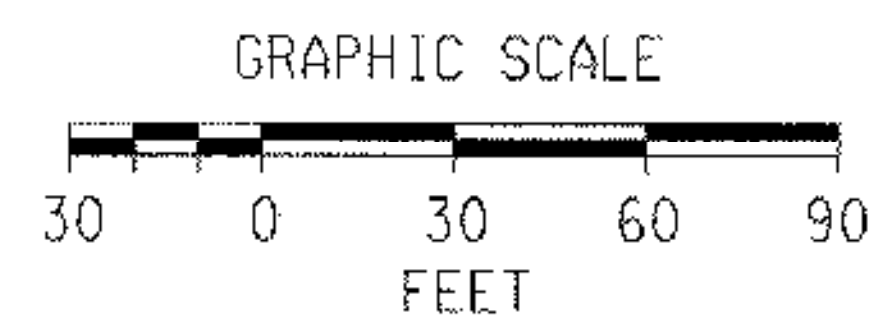
- 1 STA. AP 12+85.37' LT TO STA. AP 13+35.4' LT
MATCH INV. OF EXIST 12" ACCMP
12" CSP PIPE STUB LENGTH VARIES PER FIELD CONDITIONS.
REMOVE EXISTING CATCH BASIN
CONSTRUCT CATCH BASIN (CB #2) AT INLET, RIM 576.40 (604.20)
CLEAN CULVERT PIPE IN PLACE (601.995)
- 2 STA. A 21+67.67' LT TO STA. AP 13+35.4' LT
CONSTRUCT 15" x 18" RCP CLASS IV, INV IN 572.50, INV OUT 571.59 (601.0811)
CONSTRUCT CATCH BASIN (CB #4) AT INLET, RIM 575.50 (604.20)
- 3 STA. AP 13+35.4' LT TO STA. AP 16+78.4' LT
MATCH INV. OF EXISTING 12" ACCMP & 15" ACCMP
PIPE STUB LENGTHS VARY PER FIELD CONDITIONS
REMOVE EXISTING CATCH BASIN
CONSTRUCT CATCH BASIN (CB #3) AT INLET, RIM 576.40 (604.20)
CLEAN CULVERT PIPE IN PLACE (601.995)
- 4 STA. AP 13+15.88' LT TO STA. AP (5+43.88' LT)
CHANGE ELEVATION CATCH BASIN (CB #1) AT INLET, RIM 576.00 (604.40)
RETAIN EXIST. 12" ACCMP
CLEAN CULVERT PIPE IN PLACE (601.995)

POINT	COORDINATES	
	NORTHING	EASTING
A	17029.13	134226.84

POINT NUMBER	STATION	OFFSET	DESCRIPTION
1	A 23+75.42	70.00' LT	CENTER 50' RADIUS
2	A 23+75.42	70.00' RT	CENTER 50' RADIUS
4	A 22+72.89	70.00' RT	CENTER 50' RADIUS
6	AP 10+49.12	157.46' RT	CORNER APRON
7	AP 11+08.85	64.59' LT	CORNER APRON
8	A 21+42.65	70.00' LT	CENTER 50' RADIUS

LEGEND

	EXISTING PAVEMENT TO BE REHABILITATED		NEW CATCH BASIN
	EXISTING TIE DOWN		EXISTING CATCH BASIN
	FINISHED GRADE ELEVATION		TAXIWAY LIGHTING
	GRATE ELEVATION		BORING LOCATION
	NEW CONTOUR		FENCE
	EXISTING CONTOUR		WATERLINE & HYDRANT
	UNDERGROUND ELECTRIC		HYDRANT
			SILT FENCE

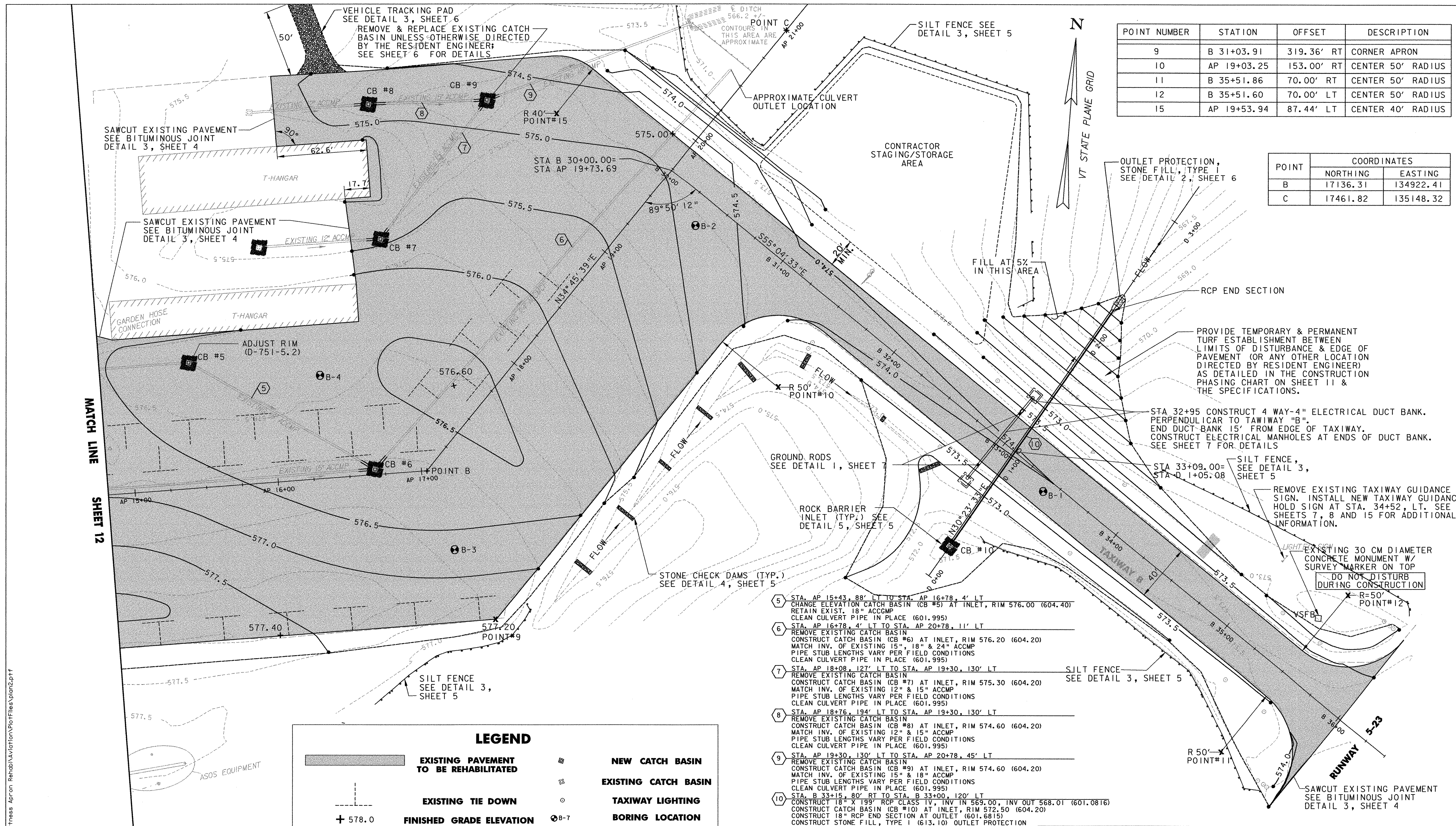


PROJECT NAME:	SPRINGFIELD AIR	FILE NAME:	plan1.prf	PLOT DATE:	05/21/2003
PROJECT NUMBER:	04-3161	PROJECT LEADER:	JBL	DRAWN BY:	MAM
		DESIGNED BY:	JBL	CHECKED BY:	JBL
		CONSTRUCTION PLAN			SHEET 12 OF 17

- NOTES:
- 1) UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - 2) INSTALL VEHICLE TRACKING PAD AS SHOWN ON SHEET 13.

C:\Users\jbl\Documents\Projects\Springfield Air\Drawings\Plan1.prf

K:\310004 (Her)tness Apron Rehab\A\Station\Plan\Files\plan2.ppt



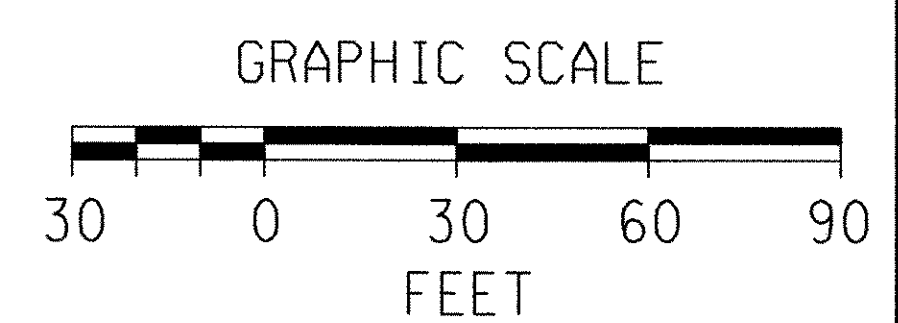
POINT NUMBER	STATION	OFFSET	DESCRIPTION
9	B 31+03.91	319.36' RT	CORNER APRON
10	AP 19+03.25	153.00' RT	CENTER 50' RADIUS
11	B 35+51.86	70.00' RT	CENTER 50' RADIUS
12	B 35+51.60	70.00' LT	CENTER 50' RADIUS
15	AP 19+53.94	87.44' LT	CENTER 40' RADIUS

POINT	COORDINATES	
	NORTHING	EASTING
B	17136.31	134922.41
C	17461.82	135148.32

- 5 STA. AP 15+43, 88' LT TO STA. AP 16+78, 4' LT
CHANGE ELEVATION CATCH BASIN (CB #5) AT INLET, RIM 576.00 (604.40)
RETAIN EXIST. 18" ACCMP
CLEAN CULVERT PIPE IN PLACE (601.995)
- 6 STA. AP 16+78, 4' LT TO STA. AP 20+78, 11' LT
REMOVE EXISTING CATCH BASIN
CONSTRUCT CATCH BASIN (CB #6) AT INLET, RIM 576.20 (604.20)
MATCH INV. OF EXISTING 15", 18" & 24" ACCMP
PIPE STUB LENGTHS VARY PER FIELD CONDITIONS
CLEAN CULVERT PIPE IN PLACE (601.995)
- 7 STA. AP 18+08, 127' LT TO STA. AP 19+30, 130' LT
REMOVE EXISTING CATCH BASIN
CONSTRUCT CATCH BASIN (CB #7) AT INLET, RIM 575.30 (604.20)
MATCH INV. OF EXISTING 12" & 15" ACCMP
PIPE STUB LENGTHS VARY PER FIELD CONDITIONS
CLEAN CULVERT PIPE IN PLACE (601.995)
- 8 STA. AP 18+76, 194' LT TO STA. AP 19+30, 130' LT
REMOVE EXISTING CATCH BASIN
CONSTRUCT CATCH BASIN (CB #8) AT INLET, RIM 574.60 (604.20)
MATCH INV. OF EXISTING 12" & 15" ACCMP
PIPE STUB LENGTHS VARY PER FIELD CONDITIONS
CLEAN CULVERT PIPE IN PLACE (601.995)
- 9 STA. AP 19+30, 130' LT TO STA. AP 20+78, 45' LT
REMOVE EXISTING CATCH BASIN
CONSTRUCT CATCH BASIN (CB #9) AT INLET, RIM 574.60 (604.20)
MATCH INV. OF EXISTING 15" & 18" ACCMP
PIPE STUB LENGTHS VARY PER FIELD CONDITIONS
CLEAN CULVERT PIPE IN PLACE (601.995)
- 10 STA. B 33+15, 80' RT TO STA. B 33+00, 120' LT
CONSTRUCT 18" X 199" RCP CLASS IV, INV IN 569.00, INV OUT 568.01 (601.0816)
CONSTRUCT CATCH BASIN (CB #10) AT INLET, RIM 572.50 (604.20)
CONSTRUCT 18" RCP END SECTION AT OUTLET (601.8815)
CONSTRUCT STONE FILL, TYPE I (613.10) OUTLET PROTECTION

LEGEND

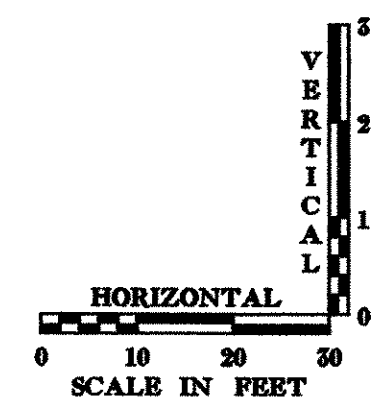
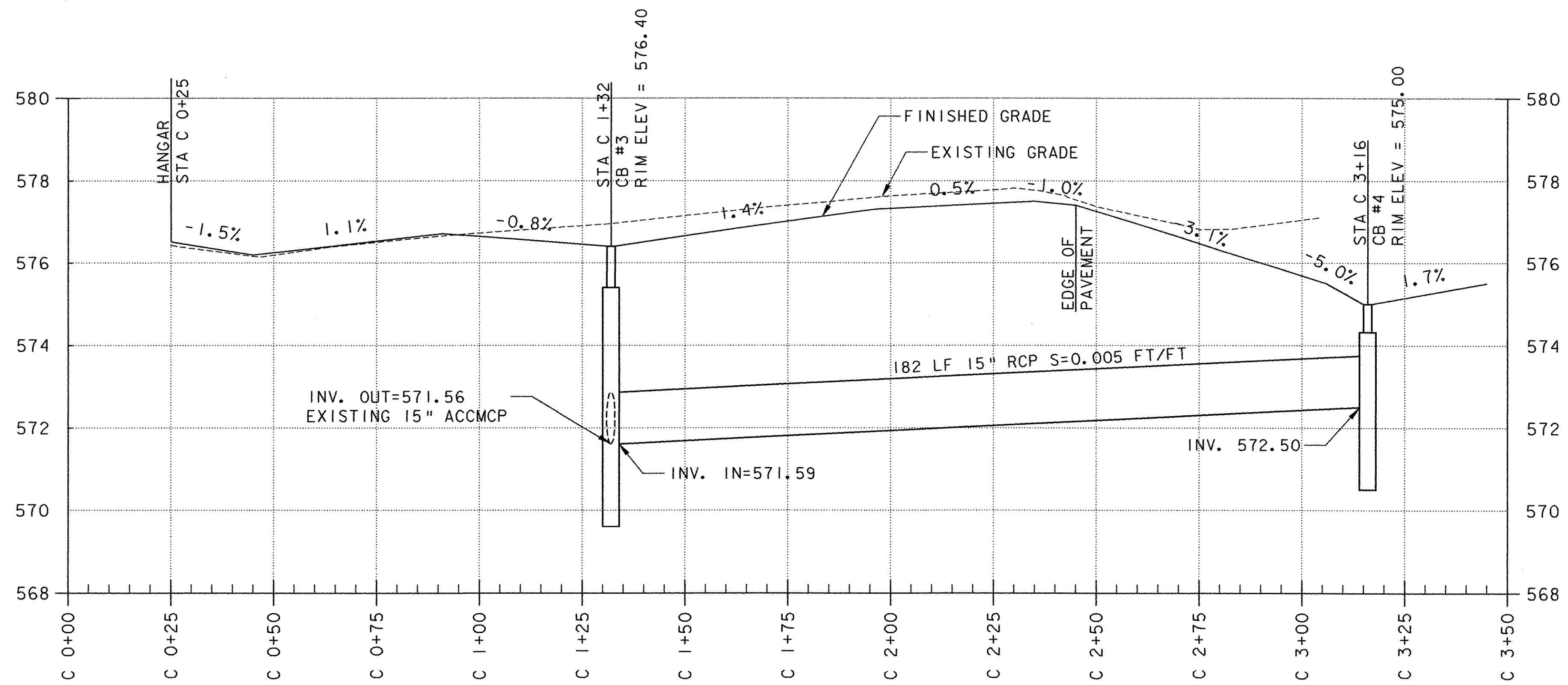
	EXISTING PAVEMENT TO BE REHABILITATED		NEW CATCH BASIN
	EXISTING TIE DOWN		EXISTING CATCH BASIN
	FINISHED GRADE ELEVATION		TAXIWAY LIGHTING
	GRATE ELEVATION		BORING LOCATION
	NEW CONTOUR		FENCE
	EXISTING CONTOUR		WATERLINE & HYDRANT
	UNDERGROUND ELECTRIC		HYDRANT
			SILT FENCE



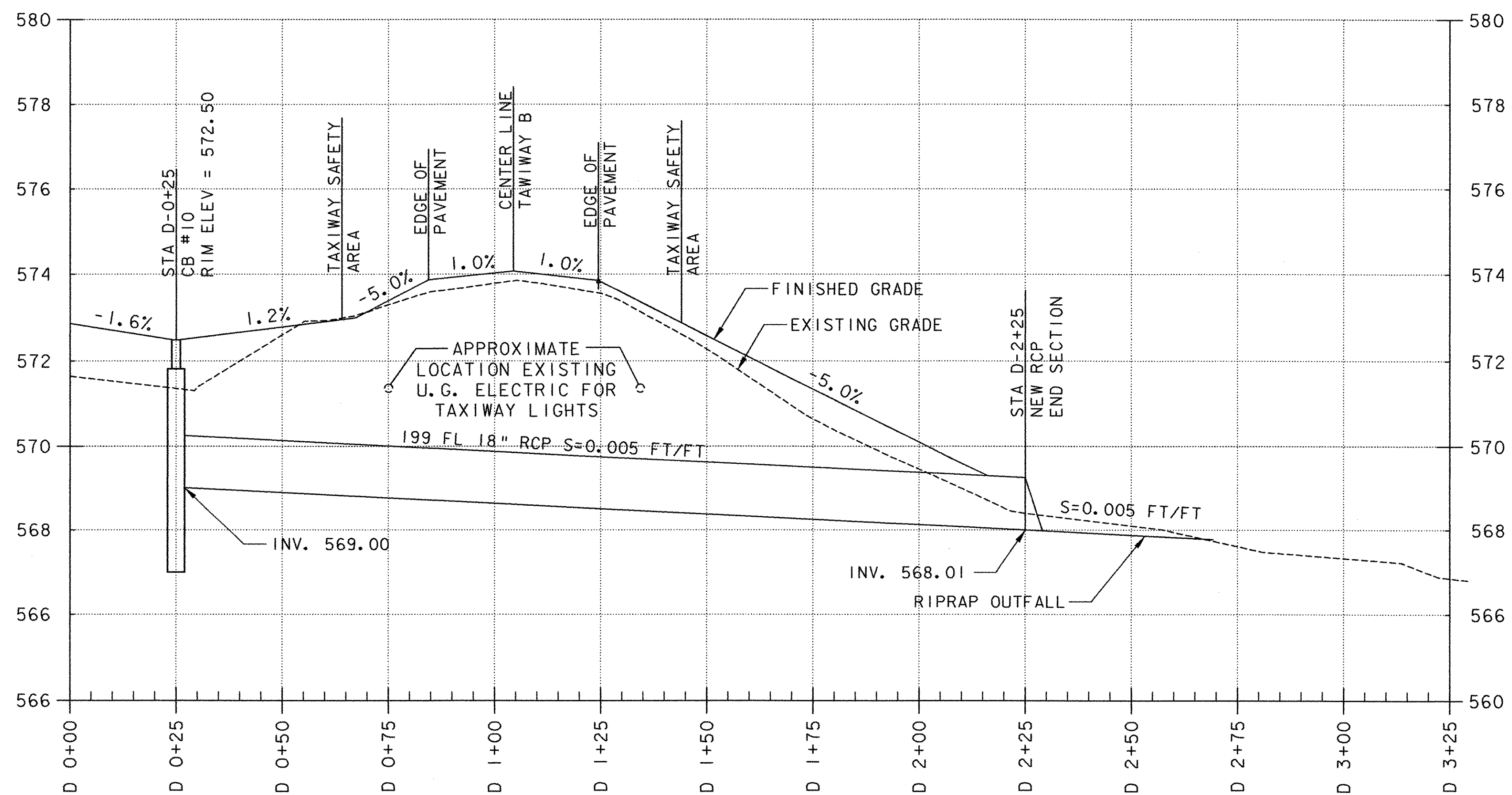
PROJECT NAME: **SPRINGFIELD AIR**
 PROJECT NUMBER: **04-3161**
 FILE NAME: **plan2.ppt**
 PROJECT LEADER: **JBL**
 DESIGNED BY: **JBL**
CONSTRUCTION PLAN

PLOT DATE: **05/21/2003**
 DRAWN BY: **MAM**
 CHECKED BY: **JBL**
 SHEET **13** OF **17**

PIPE 2 PROFILE



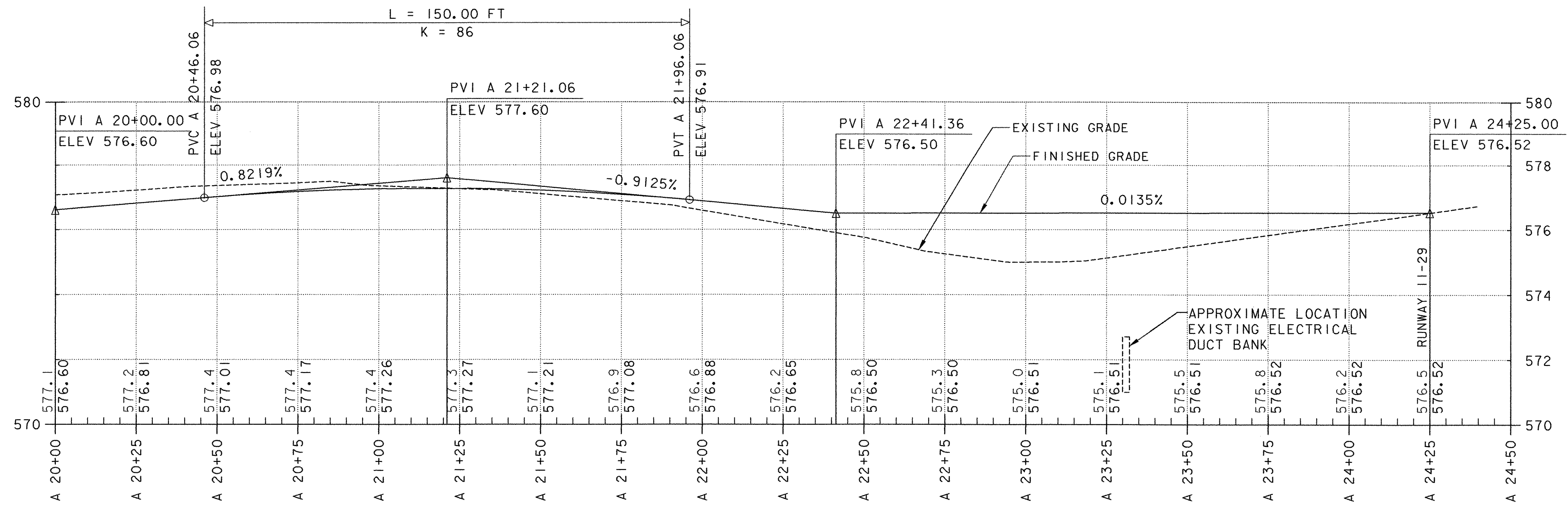
PIPE 10 PROFILE



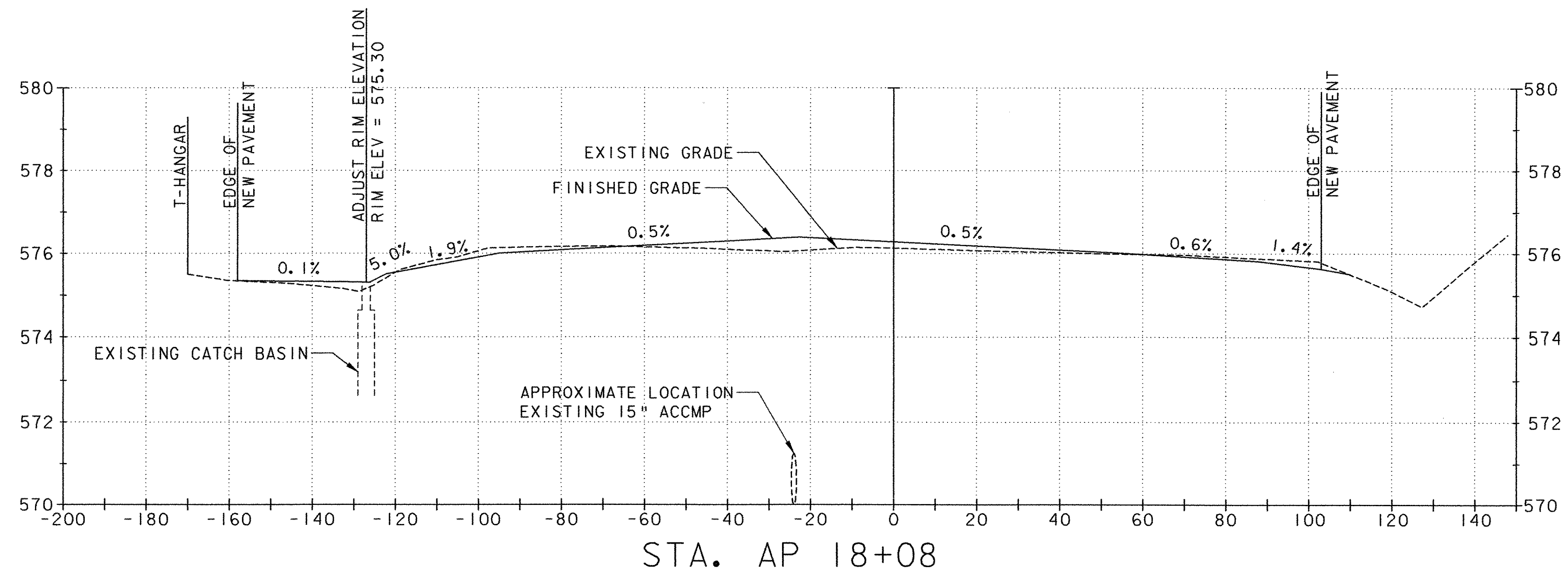
PROJECT NAME:	SPRINGFIELD AIR
PROJECT NUMBER:	04-3161
FILE NAME:	hartness xls.dgn
PROJECT LEADER:	JBL
DESIGNED BY:	MCS
PIPE PROFILES	
PLOT DATE:	05/21/2003
DRAWN BY:	TPL
CHECKED BY:	MCS
SHEET	16 OF 17

\\p01f1\des\sections\05212003\10-48-01.dwg

TAXIWAY-A PROFILE



APRON CROSS-SECTION



	PROJECT NAME: SPRINGFIELD AIR	PROJECT NUMBER: 04-3161	
	FILE NAME: hartness_xsl.dgn	DESIGNED BY: MCS	PLOT DATE: 05/21/2003
	PROJECT LEADER: JBL	CHECKED BY: MCS	DRAWN BY: TPL
	CROSS SECTION & PROFILE		SHEET 17 OF 17