

GANNETT FLEMING, P.C.
ENGINEERS AND ARCHITECTS

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No.	Date	Revision	Approved
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ENGINEERING DEPARTMENT

JOURNAL SQUARE TRANSPORTATION CENTER

MECHANICAL

Title
BUS TERMINAL ESCALATOR REPLACEMENT

LEGEND, ABBREVIATIONS, TECHNICAL DATA SYMBOLS AND GENERAL NOTES

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S. STEINER S. STEINER S. FITZGERALD
Designed by Drawn by Checked by

Date 11/17/2008

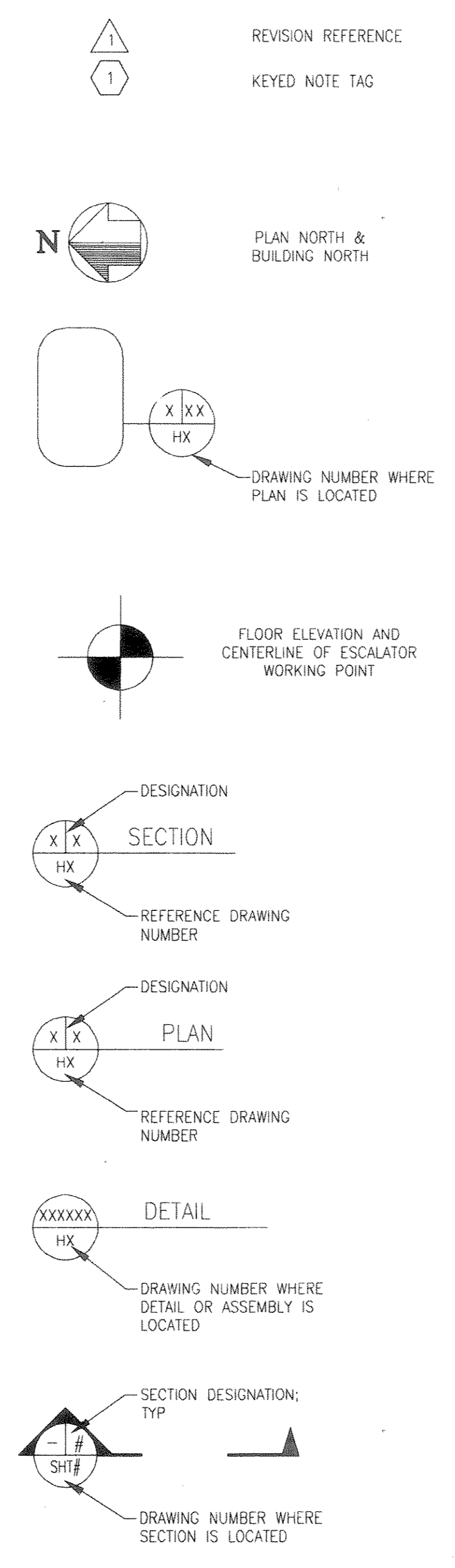
Contract Number **PAT-214.004**

Drawing Number **VT002**
PID# 07957000

GENERAL NOTES:

- ALL WORK TO CONFORM TO AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) A17.1-2004 w/ ADDENDA, AMERICAN PUBLIC TRANSPORTATION ASSOCIATION (APTA) ESCALATOR GUIDELINES, ICC/ANSI A117.1-2004, AMERICAN DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) FOR BUILDINGS AND FACILITIES 2004 EDITION, INTERNATIONAL BUILDING CODE (IBC) 2006, STATE OF NEW JERSEY ELEVATOR REGULATION CODE, NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 13, 70 AND 72 EDITIONS, NATIONAL ELECTRICAL CODE 2005 EDITION.
- REFER TO SPECIFICATIONS SECTION 14311 FOR LIST OF COMPONENTS.
- ESCALATORS SHALL BE INTEGRATED INTO EXISTING REMOTE MONITORING SYSTEM. SEE SPECIFICATION 13410.
- EXISTING ESCALATORS 13 AND 14 SHALL BE INTEGRATED INTO EXISTING CONTROLLER AND REMOTE MONITORING SYSTEM. SEE SPECIFICATION 14313.
- PERFORM FIELD SURVEY OF SURROUNDING CONDITIONS PRIOR TO CONSTRUCTION. FIELD SURVEY RESULTS SHALL BE SUBMITTED TO THE ENGINEER.
- CONTRACTOR SHALL SUBMIT PHOTOGRAPHS OF THE AREA OF WHERE WORK IS TO BE PERFORMED PRIOR TO START OF WORK. THESE PHOTOGRAPHS SHALL BE SUBMITTED TO THE ENGINEER FOR RECORD. MINIMALLY, THESE PHOTOGRAPHS SHALL INCLUDE BUT NOT LIMITED TO, SURROUNDING ADJACENT WALL AND CEILING AREAS, FLOORS AND ENTRIES, CURBING AND SIDEWALK AREAS AT BUS PLAZA LEVEL, AND ALL OTHER APPLICABLE AREAS WHERE WORK IS TO OCCUR.
- ANY DAMAGE TO SURROUNDING WALLS, FLOORS, CEILINGS OR ANY PART OF THE BUILDING OR EQUIPMENT CAUSED BY THE WORK OF THE CONTRACTOR SHALL BE RESTORED, REPAIRED AND/OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE AUTHORITY.
- ALL ELECTRICAL POWER SHALL BE DE-ENERGIZED PRIOR TO THE START OF WORK AND SHALL BE COORDINATED WITH THE ENGINEER.
- THE CONTRACTOR SHALL KEEP ALL EQUIPMENT, PARTS OF THE BUILDING, EXTERIOR SPACES, ADJACENT STREETS, SIDEWALKS, PAVEMENTS, FREE FROM MATERIALS AND DEBRIS RESULTING FROM THE EXECUTION OF THIS WORK. EXCESS MATERIALS WILL NOT BE PERMITTED TO ACCUMULATE EITHER ON THE INTERIOR OR EXTERIOR OF THE AUTHORITY PROPERTY.
- ALL WORK SHALL BE PERFORMED SO TO CAUSE THE LEAST POSSIBLE INCONVENIENCE AND DISTURBANCE TO THE FACILITY AND TENANTS OPERATION. REFER TO DIVISION 1 SPECIFICATIONS FOR HOURS OF WORK.
- ALL MATERIALS DESIGNATED FOR REMOVAL, UNLESS OTHERWISE NOTED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND THE CONTRACTOR SHALL DISPOSE OF SAID MATERIALS OFF THE AUTHORITY PROPERTY.
- BUS PLAZA AND CONCOURSE LEVEL FLOOR SLABS HAVE A LOADING RESTRICTION OF 100 POUNDS PER SQUARE FOOT. SEE STRUCTURAL DRAWING S001.
- CONTRACTOR SHALL PERFORM CLEAN UP OF ALL REFUSE, RUBBISH, SCRAP MATERIALS AND DEBRIS CAUSED BY THE WORK ON A DAILY BASIS.
- CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING IN THE WORK AREA AT NO ADDITIONAL COST TO THE AUTHORITY.
- ALL DIMENSIONS SHOWN ARE BASED ON EXISTING ESCALATOR WELLWAYS AND RELATED EQUIPMENT.
- SUBMIT BARRICADE PLANS AND DETAILS FOR ENGINEER APPROVAL PRIOR TO THE START OF WORK. SEE ARCHITECTURAL DRAWINGS A002, A003 AND A008.
- PROVIDE ADEQUATE TRUSS SUPPORTS INCLUDING BEARING PLATES WHERE CONCRETE BEAMS ARE USED. TOP OF SUPPORTS MUST BE SMOOTH AND CLEAR OF BOLTS AND ANY OTHER OBSTRUCTIONS ACROSS THE FULL WIDTH OF THE ESCALATOR. SEE STRUCTURAL DRAWINGS S014 AND S015 FOR SUPPORT CONDITIONS.
- APPLY FIREPROOFING ON TRUSS SUPPORT BEAMS TO BE APPLIED ONLY AFTER THE ESCALATOR TRUSS IS SET IN PLACE. SEE STRUCTURAL DRAWINGS S001 THRU S015.
- EXTEND POWER SUPPLY TO A JUNCTION BOX IN THE UPPER LANDING OF EACH MACHINE SPACE. SIZE OF CONDUCTOR ACCORDING TO NEC/NFPA 70, ARTICLE 620-13. SEE ELECTRICAL DRAWING E006 THRU E008.
- INSTALL DUPLEX RECEPTACLE, PER RULE 6.1.7.1.2 OF ASME A17.1, AND LIGHTING AT UPPER AND LOWER LANDINGS WITHIN CONTROLLER MACHINE SPACES. ALL 120 VOLT, SINGLE PHASE, 15 AND 20 AMPERE RECEPTACLES SHALL BE GROUND FAULT CIRCUIT INTERRUPTER PROTECTED AS PER NEC/NFPA 70, ARTICLE 620-85. SEE ELECTRICAL DRAWINGS E006 THRU E008 FOR DETAILS.
- ADEQUATE SAFETY ZONES AT THE ENTRANCE AND EGRESS ENDS AS REQUIRED BY RULE 6.1.3.6.4 OF ASME A17.1. SEE VERTICAL TRANSPORTATION DRAWINGS VT005, VT007, VT009, VT011, VT013, VT015, VT017 AND VT019.
- REQUIRED FLOOR OPENINGS, TRUSS AND MACHINE SPACE PROTECTION PER RULE 6.1.1.1 AND 6.1.2.1 OF ASME A17.1. SEE ARCHITECTURAL DRAWING A002 THRU A005.
- WHERE APPLICABLE, MATERIAL SUCH AS CLADDING CARRIED BY THE TRUSS SHALL NOT EXCEED TEN POUNDS PER SQUARE FOOT. WELDING TO THE TRUSS IS NOT ACCEPTABLE. ALL CLADDING SHALL BE BY THE CONTRACTOR. CLADDING TO BE STAINLESS STEEL #4 FINISH WITH SOUND DEADENING BACK. SEE SPECIFICATIONS 14311 AND ARCHITECTURAL DRAWING A007.
- FILL & FINAL FLOORING AROUND ESCALATOR LANDINGS SHALL BE LAID AFTER ESCALATOR IS INSTALLED. SEE ARCHITECTURAL DRAWING A007.
- NO WALLS OR OTHER BUILDING LOADS TO BE SUPPORTED BY THE TRUSS. SEE STRUCTURAL DRAWING S001.
- MINIMUM CLEARANCES OF HANDRAIL REQUIRED TO NEAREST OBSTRUCTION PER RULE 6.1.3.2 OF ASME CODE (100 MM (4 IN.) HORIZONTALLY AND 25 MM (1 IN.) VERTICALLY AWAY FROM ADJACENT SURFACES).
- 1 PAIR ANALOG TELEPHONE LINE TO PHONE JACK IN TOP OR BOTTOM LANDINGS. SEE ELECTRICAL DRAWING E006 THRU E008.
- WHERE APPLICABLE, INTERMEDIATE SUPPORT LOCATION TO BE FIELD VERIFIED PRIOR TO FABRICATION. SEE STRUCTURAL DRAWING S011 THRU S016.
- DIMENSIONS SHOWN ARE MAXIMUM VALUE. SMALLER CONDITIONS SHALL BE PERMITTED IN COORDINATION WITH THE ENGINEER.

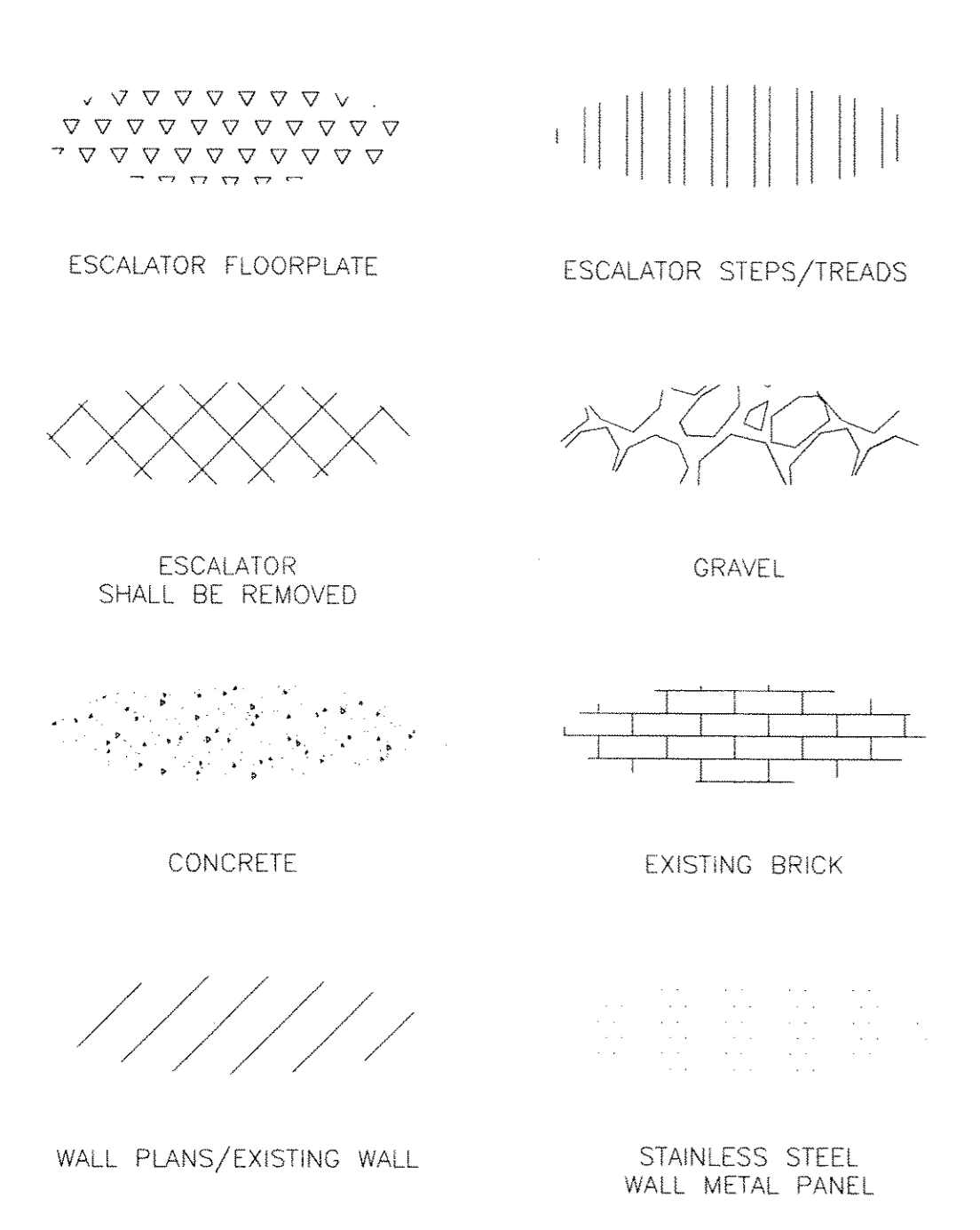
SYMBOLS



TECHNICAL DATA

ESCALATOR (No. 5 THRU 12)	
GENERAL INFORMATION	REMARKS
SEISMIC CONDITIONING	CATEGORY B
ESCALATOR NO.(S)	5 THRU 12
RISE	17' - 7"
WORKING POINT TO WORKING POINT	30' - 5 1/2"
EDGE OF SUPPORT TO EDGE OF SUPPORT	52' - 5 1/8"
NOMINAL SPEED (FPM)	100
REACTION INFORMATION	
R1 TOP (LBS) (APPROX.)	26,670
R2 BOTTOM (LBS) (APPROX.)	21,525
R3 INTERMEDIATE (LBS) (APPROX.)	N/A
STEP DIMENSIONS	
NOMINAL ESCALATOR WIDTH (FINISH WIDTH)	VARIES PER EACH EXISTING WELLWAY WIDTH (VIF)
NOMINAL STEP WIDTH (IN.)	SEE CONTRACT DRAWINGS
Ø TO Ø OF HANDRAILS (APPROX.)	3' - 11 7/8"
TRUSS WIDTH (APPROX.)	4' - 7 1/8"
OUTERDECK TO OUTERDECK (APPROX.)	VARIES PER EACH EXISTING WELLWAY WIDTH (VIF)
ELECTRICAL INFORMATION	
MAINLINE POWER REQUIREMENT	
VOLTAGE (V)	480
PHASE (ø)	3
FREQUENCY (HZ)	60
FULL LOAD RUNNING CURRENT (AMPS)	34
STARTING CURRENT (AMPS)	183
DISCONNECT CURRENT (AMPS)	60 FUSED AT 50
MOTOR HORSEPOWER (HP) (SINGLE DRIVE)	25
PIT/TRUSS HEATERS POWER REQUIREMENT	
VOLTAGE (V)	480
PHASE (ø)	3
FREQUENCY (HZ)	60
DISCONNECT CURRENT (AMPS)	15
COMBPLATE LIGHTING POWER REQUIREMENT	
VOLTAGE (V)	120
PHASE (ø)	1
FREQUENCY (HZ)	60
DISCONNECT CURRENT (AMPS)	30
COMBPLATE HEATERS POWER REQUIREMENT	
VOLTAGE (V)	120
PHASE (ø)	1
FREQUENCY (HZ)	60
DISCONNECT CURRENT (AMPS)	10
HEATING AND VENTILATION	
HEATING OUTPUT (BTU'S/HR)	3500
BTU'S/HOUR SHOWN ARE PER EACH ESCALATOR. SEE MECHANICAL DRAWING M003 AND M004.	
FINISHES AND OPTIONS	
DECK TYPE	HIGH
DECK FINISH	STAINLESS STEEL
BALUSTRADE TYPE	STAINLESS STEEL
HANDRAIL LIGHTING	N/A
SKIRT BRUSHES	AS SPECIFIED
CLADDING	SEE ARCHITECTURAL DRAWING A007

LEGEND



ABBREVIATIONS

A	AMPERE
ADAAG	AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATE
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
BTU	BRITISH THERMAL UNITS
CL	CENTER LINE
CLR	CLEAR
COL	COLUMN
DISC	DISCONNECT
DN	DOWN
DWG	DRAWING
EXIST	EXISTING
FPM	FEET PER MINUTE
FT	FEET OR FOOT
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HP	HORSEPOWER
IN	INCHES
INT	INTERMEDIATE
KW	KILOWATT
LBS	POUNDS
LNDG	LANDING
LT	LIGHT
MAX	MAXIMUM
MIN	MINIMUM
MTG	MOUNTING
N	NEUTRAL
NTS	NOT TO SCALE
OPNG	OPENING
PH	PHASE
PWR	POWER
RECEPT	RECEPTACLE
REF	REFERENCE
RM	ROOM
RPM	REVOLUTION PER MINUTE
SPEC	SPECIFICATION
SUPT	SUPPORT
SYS	SYSTEMS
TBD	TO BE DETERMINED
TEL	TELEPHONE
TYP	TYPICAL
V	VOLT OR VOLTAGE
VA	VOLT AMPERE
VIF	VERIFY IN FIELD
W	WATT
WP	WORKING POINT
WW	WELLWAY