

THESE DRAWINGS ARE INTENDED TO COVER THE MAJORITY OF EMERGENCY ROADSIDE TELEPHONE (ERT) TYPE 354 INSTALLATIONS. TYPES A, B, C, AND D (DRAWING NDX1049-029q_02.03.05.06) ARE THE MAIN PREFERRED INSTALLATIONS BECAUSE THEY INVOLVE RAPID INSTALLATION WITH MINIMAL EXCAVATION AND LOW RISK OF DISRUPTION TO SERVICES. THE LARGE PLINTH AREA ALSO PROVIDES A HARDSTANDING AREA FOR USERS. TYPE J (DRAWING NDX1049-029q_10) COULD BE USED WHERE THE TELEPHONE CAN BE MOVED BEHIND THE DOWNSTREAM TERMINATION OF A SAFETY FENCE. THIS HAS THE BENEFIT OF PROVIDING A SAFER HARDSTANDING ENVIRONMENT FOR THE USER. TYPE M (DRAWING NDX1049-029q_11) RETAINS THE EXISTING CUT-OFF POST TYPE 71, BUT SHOULD ONLY BE USED IN VERY LIMITED CIRCUMSTANCES WHERE IT IS NOT POSSIBLE TO USE ANY OTHER INSTALLATION TYPES. ALL OTHER TYPES ARE FOR SITES WITH PARTICULAR ATTRIBUTES (E.G. SURFACE MOUNT, TUNNELS, PARAPETS). FOR THE APPLICATION OF HANDRAILS (E.G. AT EMBANKMENT SITES) SEE DRAWING NDX1049-029q_13.

1. IMPROVED DISABLED FACILITIES ARE PROVIDED FOR BY WAY OF RAMPS, ACCESS, CLEARANCES ETC. WHERE THE REQUIRED ACCESS PARAMETERS CANNOT BE ACHIEVED AT PARTICULAR SITES (E.G. THE 50-150 OFFSET FROM THE SAFETY FENCE) THE OVERSEEING ORGANISATION MUST BE CONSULTED.
2. A PARTICULAR SITE MAY INCORPORATE INSTALLATION ASPECTS FROM MORE THAN ONE DRAWING IN THE DRAWING SET, AS APPLICABLE. WHERE A PROPOSED INSTALLATION IS NOT COVERED BY THE STANDARD DRAWINGS, APPROVAL IS TO BE OBTAINED IN ADVANCE FROM THE OVERSEEING ORGANISATION.
3. EXISTING SERVICES ARE TO BE LOCATED PRIOR TO COMMENCING SITE WORKS AND ARE TO BE FULLY MAINTAINED THROUGHOUT THE WORKS BY SUBMISSION OF NRSWA C2 NOTICE TO TSCC.
4. FOR CONSTRUCTION DETAILS OF BASES FORMED AT SITE REFER TO DRAWING NDX 1049-02d SHEETS 14 AND 15.
5. SURFACE FINISH TO EXPOSED FACES OF SITE CONSTRUCTED BASES WILL BE F2 VERTICAL AND U2 HORIZONTAL. SEE SHW SUB CLAUSE 1708.4.
6. PLACING AND COMPACTION OF CONCRETE IN BASES FORMED AT SITE SHALL COMPLY WITH SHW SUB CLAUSE 1710.3.
7. VERGE DETAILS AND DIMENSIONS SHALL ACCORD WITH THOSE SHOWN IN THE MCHW, HIGHWAY CONSTRUCTION DETAILS (HCD'S).
8. TELEPHONES TO BE ALIGNED WITHIN ±1' OF VERTICAL USING THE MINIMUM NUMBER OF SPACER WASHERS NECESSARY. VERTICAL ALIGNMENT TO BE CHECKED USING ELECTRONIC SPIRIT LEVEL LAID AGAINST ERT COLUMN MODULE FRAME.
9. DUCT INSTALLATION AND MATERIALS TO BE IN ACCORDANCE WITH SHW SERIES 500 AND HCD'S - SERIES 1500.
10. ROADSIDE FURNITURE AND DRAINAGE FEATURES MUST NOT BE ALTERED OR AFFECTED IN ANY WAY UNLESS SPECIFIED OR WITH THE AGREEMENT OF THE OVERSEEING ORGANISATION.
11. INSTALLATIONS SHALL AVOID PONDING ON OR AROUND PLINTHS OR ACCESS AREAS. IN PARTICULAR, KERB REPROFILING SHALL NOT RESULT IN THE EXISTING DRAINAGE SYSTEM BEING DIVERTED, E.G. BY ALLOWING SURFACE WATER TO FLOW OFF THE CARRIAGEWAY ACROSS, OR POND IN, THE REPROFILED AREA.
12. WHERE ACCESS TO THE EMERGENCY TELEPHONE CROSSES ROADSIDE DRAINAGE FEATURES, ACCESS SHALL BE IMPROVED BY REFERRING TO THE ADJACENT TABLE.
13. ALL WORKS ARE TO BE IN ACCORDANCE WITH MCHW/SHW/HOD'S/1500 SERIES/SRS AS APPLICABLE.
14. WHERE RETAINING MEASURES ARE REQUIRED, THE RETAINING STRUCTURE SHALL BE CLASSIFIED IN ACCORDANCE WITH BD2. RETAINING MEASURE PROPOSALS SHALL BE SUBJECT TO THE APPROVAL OF THE OVERSEEING ORGANISATION.

DRAINAGE FEATURE	ACCESS REQUIREMENT
FILTER DRAIN (AS HOD B1)	50mm OF FILTER DRAIN AGGREGATE TO BE REMOVED FROM UNDER PLINTH/ACCESS PAVING AND REPLACED WITH 50mm BITUMINOUS SURFACING OR EQUIVALENT GEOTEXTILE SEPARATION LAYER AND 50mm MINIMUM COMPACTED SAND/GRAVEL MIX.
SURFACE WATER CHANNEL (AS HOD B2)	1) MAX. 15mm THICK APPLIED HEAVY DUTY NON SLIP SURFACE IN ACCORDANCE WITH BS 6925 EITHER SIDE OF TELEPHONE. 2) WHERE POSSIBLE THE EMERGENCY TELEPHONE SHOULD BE AT LEAST 500 FROM THE CHANNEL TO ALLOW STANDING ROOM.
CHANNEL BLOCKS (AS HOD B4)	EMERGENCY TELEPHONE TO BE INSTALLED ADJACENT TO THE CHANNEL BLOCK USING 600 CUBE CONCRETE PLINTH BASE DETAILED IN DRAWING NDX 1049-02d_15. THIS WILL AVOID THE NEED TO CROSS THE CHANNEL BLOCK.
KERBS (AS HOD B9)	1) HOLLOW KERBS. KERBING TO BE RE-PROFILED TO +12 OF CARRIAGEWAY LEVEL TO ALLOW WHEELCHAIR ACCESS. CONTINUITY OF DRAINAGE FLOW WITHIN THE HOLLOW KERB MUST BE MAINTAINED ALONG THE HOLLOW KERB RUN. 2) OTHER KERBS. KERBING TO BE RE-PROFILED TO +12 OF CARRIAGEWAY LEVEL TO ALLOW WHEELCHAIR ACCESS. 3) INSTALLATION SHALL BE AS CLOSE AS PRACTICAL DOWNSTREAM OF EXISTING ROAD GULLY TO AVOID WATER PONDING IN FRONT OF BASE.
OVER THE EDGE DRAINAGE (AS HOD B13)	LOCALISED PAVING OR HARDENING MINIMUM 1000mm EITHER SIDE OF THE TELEPHONE.
LINEAR DRAINAGE (SLOT DRAINAGE) (AS HOD B17)	WHERE SLOTS IN THE LINEAR DRAINAGE ARE ARRANGED IN SUCH A WAY AS TO ALLOW TRAPPING OF WHEELCHAIR WHEELS, THE TOP (SLOTTED) SECTION IS TO BE REMOVED AND REPLACED WITH AN INTEGRAL OR PERMANENTLY BONDED GRATING SECTION, MINIMUM 1000 EITHER SIDE OF THE TELEPHONE.

15. THE APPROVAL OF THE OVERSEEING ORGANISATION MUST BE OBTAINED BEFORE ANY WORKS ARE STARTED WHICH MAY RESULT IN ALTERATIONS TO, OR INTRUSION INTO EXISTING STRUCTURES (E.G. DRILLING, CHANNELLING, KERB REPROFILING).
16. ALTHOUGH THE DOOR MAY FACE THE CARRIAGEWAY OR DOWNSTREAM OF THE TRAFFIC DIRECTION, DEPENDING ON INSTALLATION, THE HEADER MODULE SHALL ALWAYS BE ORIENTED SO THAT EXTERNAL LABELS FACE UPSTREAM AND DOWNSTREAM.
17. ALL NEW INSTALLATIONS WILL REQUIRE THE APPROVAL OF THE OVERSEEING ORGANISATION.
18. IN THE CASE OF PLINTH INSTALLATIONS (E.G. TYPE A, B, C, D AND J), SPARE CABLE SHALL BE PULLED THROUGH AND RETAINED IN THE CABLE PIT MOLDING. FOR TYPE E, K AND M INSTALLATIONS, SPARE CABLE MAY BE RETAINED IN A NEARBY UNDERGROUND CHAMBER. IF NO SUITABLE CHAMBER EXISTS, ONE MAY BE INSTALLED (FOR RELEVANT DETAILS SEE DRAWING MCH 0811 SHEET 3).
- IN DECIDING WHETHER THERE IS SUFFICIENT EXISTING SPARE CABLE, THE INSTALLER SHALL TAKE INTO ACCOUNT THE RISK OF ERT KNOCKDOWN AT EACH SITE. SHOULD MORE CABLE BE REQUIRED, THE INSTALLER SHOULD CHOOSE THE MOST ECONOMIC OF THE FOLLOWING SOLUTIONS:
 - a) INSTALL NEW CABLE BACK TO AN EXISTING JOINT/TERMINATION. THIS MAY BE MORE COST-EFFECTIVE WITH DUCTED SYSTEMS.
 - b) MOVE ERT LOCATION TO FREE-UP MORE CABLE (HAVING DUE REGARD TO OTHER ISSUES INVOLVED WITH ERT RELOCATION).
 - c) INSTALL NEW CABLE JOINT AND CABLE. IF SPACE AND CABLE LENGTH PERMIT JOINTS SHALL BE HOUSED IN THE ERT CABLE PIT MOLDING. FAILING THAT, IN DUCTED SYSTEMS, A JOINTING BOX COMPLETE WITH CABLE JOINT ENCLOSURE (CIE TYPE 157) SHALL BE INSTALLED (FOR RELEVANT DETAILS SEE DRAWING MCH 0811 SHEET 3). IN NON-DUCTED SYSTEMS, A SUITABLE ARMOURED CABLE JOINT SHALL BE USED, WHICH SHALL HAVE ITS LOCATION PERMANENTLY MARKED ABOVE GROUND, BY USING A MARKER BLOCK, INSTALLING IN A JOINT CHAMBER OR BY OTHER SUITABLE MEANS.
 - d) NO FACILITY FOR SPARE CABLE TO BE PROVIDED AT ESM SITES.
19. UNDER-PLINTH DUCT SHALL BE USED FOR ALL NMCS AND PSTN PLINTH INSTALLATIONS. IN DUCTED SYSTEMS, A SUITABLE PROPRIETARY SEALED JOINT SHALL BE USED TO CONNECT THE UNDER-PLINTH DUCT TO THE DUCTED NETWORK. THE UNDER-PLINTH DUCT SHALL ALSO BE SEALED AGAINST WATER INGRESS, BY SUITABLE MEANS, AT ITS JUNCTION WITH THE CABLE PIT MOLDING.
20. THESE NOTES SHALL BE READ IN ACCORDANCE WITH MCH 1983 EMERGENCY ROADSIDE TELEPHONE TYPE 354 IMPLEMENTATION GUIDE.
21. GLOBAL SYSTEM OF MOBILE COMMUNICATIONS (GSM) VARIANT IS USED WHEN THE TELEPHONE 354 USES MOBILE TELEPHONE TECHNOLOGY RATHER THAN CABLES.
22. PRIOR TO INSTALLATION AT EXISTING PSTN ERT SITES, COMMUNICATIONS SERVICE PROVIDER MUST BE CONSULTED WITH REGARD TO TELEPHONE LINE DISCONNECTION AND RE-CONNECTION RIGHTS.
23. FOR H.A. STOCK CODE NUMBERS SEE DRAWING NDX1049-02no_17. (OMIT THIS NOTE FOR MFI CONTRACT BUT REINSTATE FOR ON-GOING MAINTENANCE ONCE STOCK CODES ARE KNOWN).

This drawing was generated on computer and must not be manually updated

TYPICAL ERT 354 GENERAL INSTALLATION NOTES



Note:
The NDX series of drawings represents non site specific installations of standard equipment and site layouts.

TITLE		ORIGINAL DRAWING SIZE: 297 x 420		DRN	A.N.O.	CHKD	A.W.	SCALE
TOLERANCE ± 1 UNLESS OTHERWISE STATED		TOLERANCE ± 1 UNLESS OTHERWISE STATED		DATE	---	DATE	---	N.T.S.
THIRD ANGLE PROJECTION DO NOT SCALE		THIRD ANGLE PROJECTION DO NOT SCALE		DRG. NO.	NDX1049-02no			SHT. NO.
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ISSUE	AMENDMENTS	APPD/DATE
C	GENERALLY UPDATED	-
E	UPDATED SEE REV. SHIT.	BD 30/11/09
D	REDRAWN	BD 13/10/09