



**Addendum to the Water Industry Technical
Standards and National Codes of Practice**

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Sewerage Code

WSA 02-1999

Addendum

PART 3 – STANDARD DRAWINGS

Gippsland Water Business Management System	
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Gippsland Water Addendum

PART 3 – STANDARD DRAWINGS

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EMBEDMENT, BACKFILL AND SUPPORTS

SEW-100 TRENCH AND BACKFILL TYPICAL ARRANGEMENT

Note the following changes:

- Note 5 – Detector tape shall be used on all pipelines including property connections that exceed 5m in length.
- Note 6 – Adopt minimum pipe cover requirements of AS/NZS 2566.1.
- For pipe embedment material refer to Table 6 of Part 4.
- Backfill for areas subject to vehicular loading shall be noted on the drawings as “Type A”. Where backfill type is not shown on the drawings it is assumed to be “Type B” which is suitable for areas not subject to vehicular loading.

SEW-101 PIPE EMBEDMENT AND SUPPORT TYPES 1 TO 8

Note the following changes:

- Note 6 – Detector tape shall be used on all pipelines and is required to be placed on top of the pipe embedment.

SEW-102 PIPE SUPPORTS TYPES 9 TO 11 & FOR NON-SUPPORTIVE SOILS

No addendum.

SEW-103 TRENCHSTOP AND BULKHEADS TYPICAL ARRANGEMENT

Note the following changes:

- The table of additional requirements for varying slopes conflicts with Table 2.9 in Part 1. The table in this drawing shall be replaced with Table 2.9 in Part 1.

SEW-104 TRENCH DRAINAGE TYPICAL ARRANGEMENT

No addendum.

SEW-105 SYPHON CREEK CROSSING TYPICAL ARRANGEMENT

No addendum.

Refer to addendum Clause 2.12 in Part 1.

SEW-106 AQUEDUCT TYPICAL ARRANGEMENT

No addendum.

This drawing is typical for DI aqueducts. Other materials can be used subject to approval from Gippsland Water. Gippsland Water will have specific requirements for aqueducts.

SEW-107 PROTECTION GRILLE TYPICAL ARRANGEMENT

No addendum.

SEWER MAINS

SEW-201 PRECAST MAINTENANCE HOLE TYPE P1 & P2 TYPICAL ARRANGEMENT

Note the following changes:

- References to specific note numbers should be made “Refer to notes on this drawing”.
- Note 3 – Gippsland Water authorises the use of Precast and Cast Insitu combinations to suit application.
- Insitu concrete shall be as per Part 1 Clause 2.9.3.6.

SEW-202 CAST IN-SITU MAINTENANCE HOLE TYPE C1 & C2 TYPICAL ARRANGEMENT

Note the following changes:

- All concrete to be Grade S32 as per Part 1 Clause 2.9.3.6.
- 200mm base depth is a minimum.

SEW-203 SEWER MAINTENANCE HOLE BASE ARRANGEMENT TYPES A, B, C & GENERAL DETAILS

Note the following changes:

- Gippsland Water does not approve manhole drops Type B and Type C for use.

SEW-204 SEWER MAINTENANCE HOLE TYPICAL CHANNEL AND WORKING AREA ARRANGEMENTS

Note the following changes:

- External manhole drops are not applicable. Delete bottom detail.

SEW-205 SEWER MAINTENANCE HOLE TYPICAL CHANNEL DETAILS

Note the following changes:

- The offset dimension is assumed to be zero unless shown otherwise on the design drawings.

SEW-206 SEWER MAINTENANCE HOLE TYPE C2 & P2 INTERNAL DROP CONNECTION DETAILS

Note the following changes:

- Gippsland Water does not approve the Typical Tapered Wall Entry arrangement for use. All entries into MH's shall be made in the vertical wall section of the structure.
- Drop pipe clips and fasteners shall be grade 316 stainless steel. Spacing between clips shall be 1500 mm maximum.

SEW-207 SEWER MAINTENANCE HOLE ACCESS COVERS TYPICAL INSTALLATIONS

Note the following changes:

- Note 3 to be replaced with Clause 2.9.3.8 in Part 1.
- The finished level for a 100 year flood level H=300mm.

SEW-208 SEWER MAINTENANCE HOLE STEP IRON & LADDERS TYPICAL ARRANGEMENT

Note the following changes:

- Note 4 – All fittings, step irons and ladders shall be in accordance with Part 2 Section 9.7 and 9.8 of the Addendum.
- Remove Note 5.

SEW-209 SEWER MAINTENANCE SHAFT TYPICAL ARRANGEMENT

Note the following changes:

- Sealing cap to be screw type only.
- Note 6 – Access cover frames and support slab in accordance with Section 10 of Part 2.

SEW-210 TERMINAL MAINTENANCE SHAFT AND INSPECTION SHAFTS TYPICAL ARRANGEMENTS

Note the following changes:

- ***Inspection shafts are not applicable on reticulated sewer mains as they relate to property connection sewers***
- Note 3 – Inspection shaft covers and support base in accordance with Section 10 of Part 2.
- Note 4 – Bedding of pipe below inspection shaft to be compacted in layers not exceeding 75mm using a vibrating plate or similar mechanical means.
- Use only PE or UPVC pipe and fittings.
- Gippsland Water will only accept DN 225 long radius 90 deg. Vertical sweep bends for use in terminal maintenance shafts.
- Gippsland Water require terminal maintenance shafts to be DN 225.

SEW-211 SEWER MAINS EXPOSED AND CONCEALED VERTICAL RISERS

No addendum.

Refer to addendum Clause 2.9.7 in Part 1.

SEW-212 ACCESS SHAFT COVERS TYPICAL ARRANGEMENTS

Note the following changes:

- All Maintenance Shaft and Terminal Maintenance Shaft covers must be installed as detailed to either a Class “B” (Non-Trafficable) or Class “D” (Trafficable) application. Gippsland Water requires these covers to be manufactured from either ductile iron, cast iron, or steels, which ever is suitable to its application Class, and in line with AS3996 (Typical of a “Gatic” or “Gatic cast body concrete fill” arrangement).
- “Alternate light duty inspection cover arrangement” should read “Alternate cover arrangement for property connection inspection opening”.
- “Alternative light duty inspection cover arrangement” are only to be used on customer property connection openings located in a non trafficable location.
- Customer property connection openings located in trafficable locations (such as driveways) must be constructed to Class “D” requirements, the “Alternative light duty inspection cover arrangement” are not permitted in these locations.

SEW-213 VENTING TYPICAL ARRANGEMENT

No addendum.

Refer to addendum Clause 2.11 in Part 1.

SEW-214 WATER SEALS TYPICAL ARRANGEMENTS

No addendum.

Refer to addendum Clause 2.10 in Part 1.

PROPERTY CONNECTIONS

SEW-300 PROPERTY CONNECTIONS SHEET 1 PRIVATE PROPERTY & RESERVES

Refer to Addendum drawing SEW-300 (Appendix 1).

SEW-301 PROPERTY CONNECTIONS SHEET 2 ROAD RESERVE

Refer to Addendum drawing SEW-301 (Appendix 2).

SEW-302 PROPERTY CONNECTIONS TYPE A, B, C1 & C2 TYPICAL ARRANGEMENTS

Refer to Addendum drawing SEW-302 (Appendix 3). Connection types A, B, C1 & C2 are not permitted. This drawing refers to connection types 1, 2, 2A, 4 & 4A.

SEW-303 PROPERTY CONNECTIONS TYPE D & E TYPICAL ARRANGEMENTS

Note the following changes:

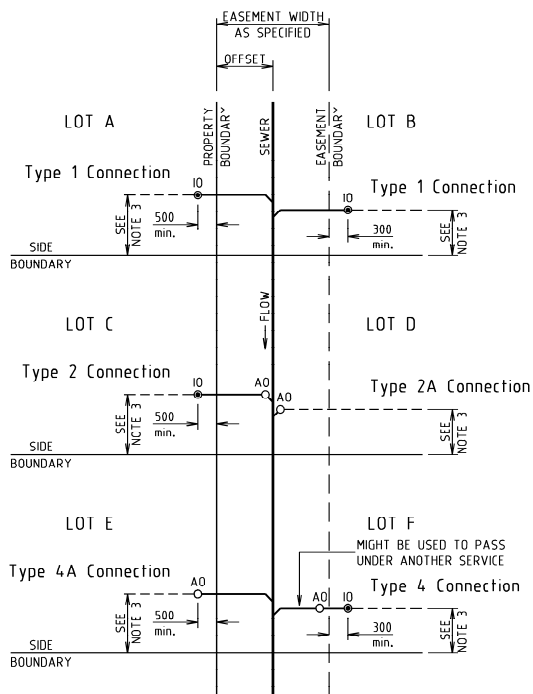
- Type E property connections to be DN150.
- Type D property connection not to be used. Refer to Type 4 connection on drawing SEW-302.
- Gippsland Water does not approve the use of concrete thrust blocks on property connections.
- Note 5 – Boundary inspection opening forms part of the property connection.

SEW-304 PROPERTY CONNECTIONS TYPE F & TEMPORARY END LOCATION MARKER TYPICAL ARRANGEMENTS

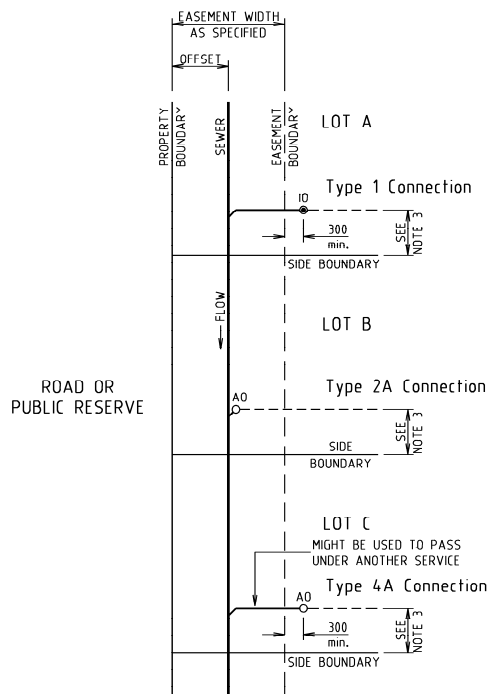
Note the following changes:

- Gippsland Water does not approve the use of Type F connections to sewers in private property.
- Note 5 – Marker tape system shall be used to identify temporary ends of connections.
- Note 6 – Boundary inspection opening forms part of the property connection.

Appendix 1 (SEW-300)



**TYPICAL CONNECTION METHODS FOR SEWERS
AT REAR OR SIDE PROPERTY BOUNDARIES**



**TYPICAL CONNECTION METHODS FOR SEWERS
INSIDE BOUNDARIES ADJOINING ROADS OR RESERVES**

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. "AS SPECIFIED" MEANS AS SPECIFIED IN GIPPSLAND WATERS DOCUMENT 'ADDENDUM TO THE WATER INDUSTRY TECHNICAL STANDARDS AND CODES OF PRACTICE'.
3. PROPERTY CONNECTION LOCATIONS (OR TIE DISTANCE) AS SPECIFIED ON THE DRAWINGS AND NOT LESS THAN 1.0m FROM ANY SIDE BOUNDARY.
4. ALL CONNECTION POINTS, WITH EXCEPTION TO TYPE 2A CONNECTIONS, SHALL BE A MINIMUM OF 500mm FROM THE SEWER MAIN.
5. REFER TO STANDARD DRAWINGS SEW-302 TO SEW-304 FOR CONNECTION DETAILS.

DO NOT SCALE

WSA ADDENDUM DRAWING No. **SEW-300**

REVISIONS	No.	DATE	DESCRIPTION	APP'D

LEGEND:

IO	INSPECTION OPENING (RAISED TO SURFACE)
AO	ACCESS OPENING (NOT RAISED TO SURFACE)



11 Montworth Place
Traralgon, Victoria, 3844.
Ph./Fax 03 5174 7983
Mobile 0407 864 699

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Design Drafting
Water Industry Services
Large Format Plotting

CERTIFICATION OF COMPLIANCE WITH GIPPSLAND WATERS'S DESIGN & DRAFTING REQUIREMENTS.

DESIGNED: / /
DRAWN: 19/12/01 Jan Becker
CHECKED: 19/12/01 Heather Riches

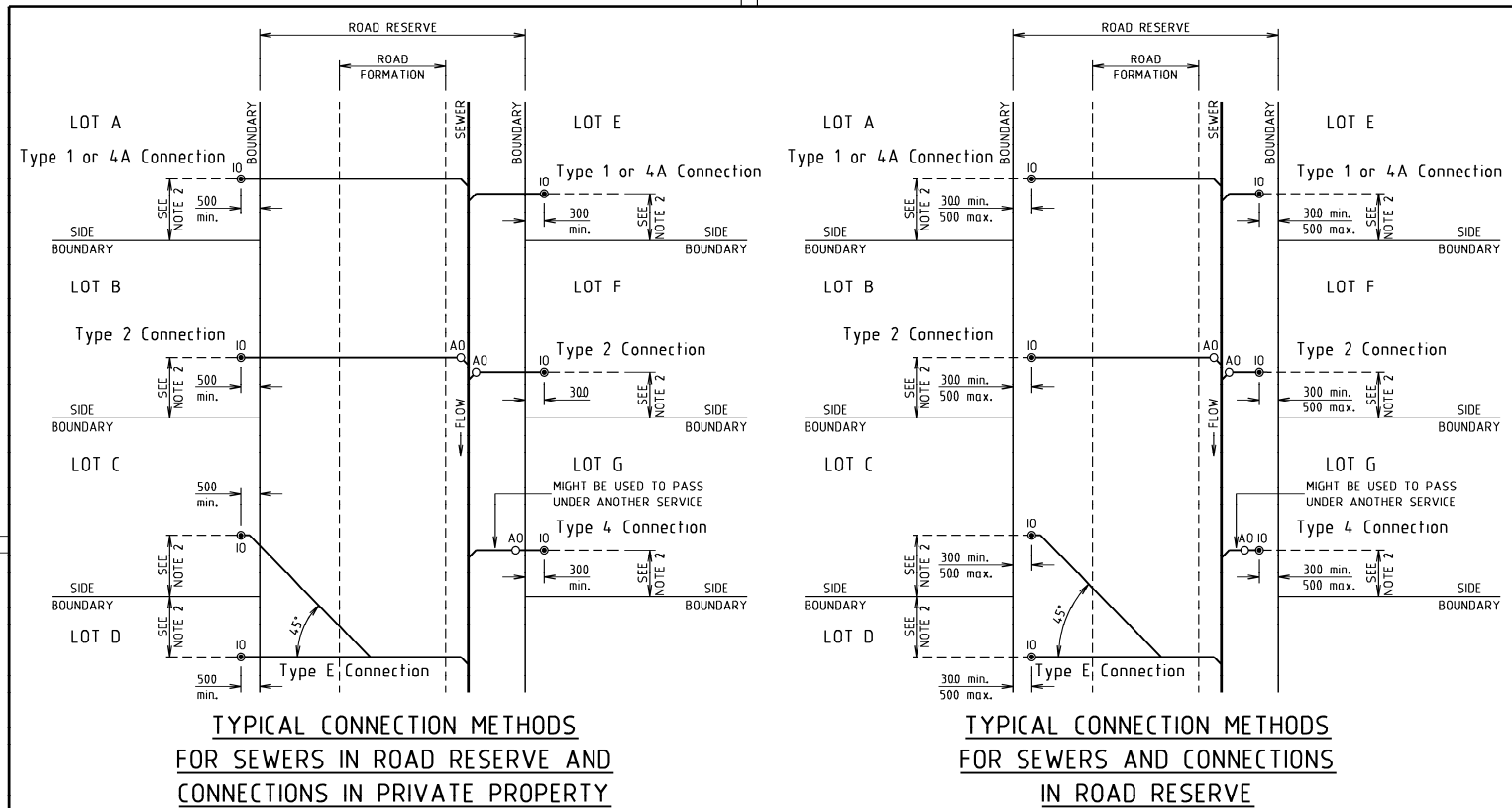


GIPPSLAND WATER

SEWERAGE CODE ADDENDUM - STANDARD DRAWING
PROPERTY CONNECTIONS - SHEET 1
PRIVATE PROPERTY & RESERVES
FOR PIPE SYSTEMS UP TO AND INCLUDING DN300

DRAWING No. **A3-21590** REV. **0**

Appendix 2 (SEW-301)



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. PROPERTY CONNECTION LOCATIONS (OR TIE DISTANCE) AS SPECIFIED ON THE DRAWINGS AND NOT LESS THAN 1.0m FROM ANY SIDE BOUNDARY.
3. ALL CONNECTION POINTS, WITH EXCEPTION TO TYPE 2A CONNECTIONS, SHALL BE A MINIMUM OF 500mm FROM THE SEWER MAIN.
4. REFER TO STANDARD DRAWINGS SEW-302 TO SEW-304 FOR CONNECTION DETAILS.

DO NOT SCALE

REVISIONS	No.	DATE	DESCRIPTION	APP'D

LEGEND:

- IO ● INSPECTION OPENING (RAISED TO SURFACE)
- AO ○ ACCESS OPENING (NOT RAISED TO SURFACE)



11 Wentworth Place
Traralgon, Victoria, 3844
Ph./Fax: (03) 5374 7583
Mobile 0402 844 691

Digital Mapping &
Design Drafting
Water Industry Services &
Large Format Plotting

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DESIGNED: / /
DRAWN: 19/12/01 Jan Becker
CHECKED: 19/12/01 Heather Riches

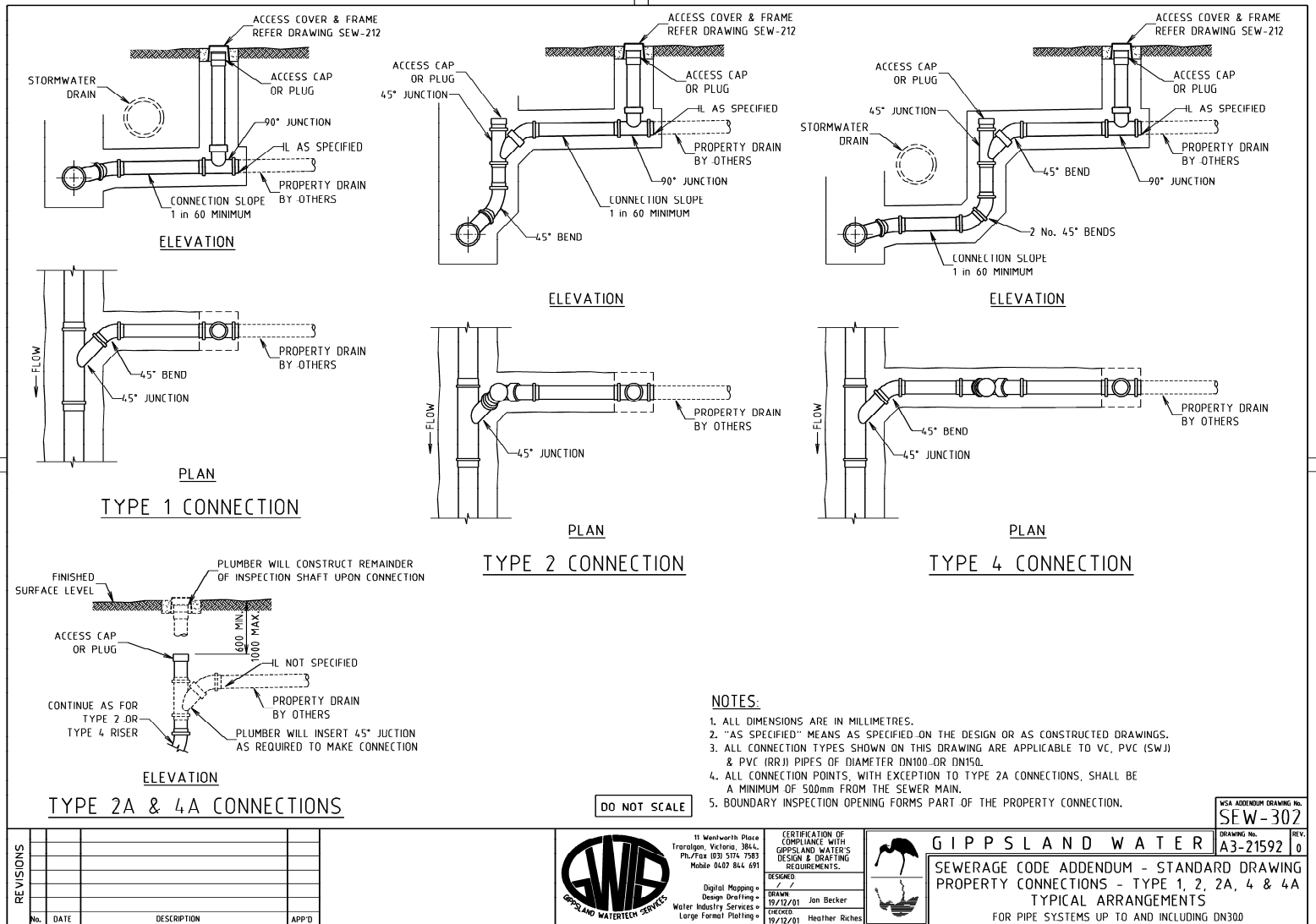


GIPPSLAND WATER

SEWERAGE CODE ADDENDUM - STANDARD DRAWING
PROPERTY CONNECTIONS - SHEET 2
ROAD RESERVES
FOR PIPE SYSTEMS UP TO AND INCLUDING DN300

WSA ADDENDUM DRAWING No. **SEW-301**
DRAWING No. **A3-21591** REV. **0**

Appendix 3 (SEW-302)



REVISIONS			
No.	DATE	DESCRIPTION	APP'D



11 Wentworth Place
Traralgon, Victoria, 3844,
Ph./fax 039 574 7583
Mobile 0407 844 691

CERTIFICATION OF
COMPLIANCE WITH
GIPPSLAND WATER'S
DESIGN & DRAFTING
REQUIREMENTS.

DESIGNED
2/2

DRAWN
19/12/01 Jan Becker

CHECKED
19/12/01 Heather Riches



GIPPSLAND WATER

SEWERAGE CODE ADDENDUM - STANDARD DRAWING
PROPERTY CONNECTIONS - TYPE 1, 2, 2A, 4 & 4A
TYPICAL ARRANGEMENTS
FOR PIPE SYSTEMS UP TO AND INCLUDING DN300

WSA ADDENDUM DRAWING No.
SEW-302

DRAWING No.
A3-21592

REV.
0