

STANDARD SPECIFICATION FOR ROADWORKS V 4.1 - November 2019

SCHEDULES

HOLD POINTS

WITNESS POINTS

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HOLD POINTS

WITNESS POINTS

PROJECT INFORMATION

Project Number;

RFT Number;

Project title;

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.....
.....

Superintendent;

Name;

Phone number;

Contact person (Project Manager/Officer)

Name;

Phone number;

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	2 of 22

1. HOLD POINTS AND WITNESS POINTS SCHEDULES

1.1 SCHEDULE 1 - HOLD POINTS

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
01 MISCELLANEOUS PROVISIONS				
VOLATILE SUBSTANCES MANAGEMENT Provide details of the volatile substances proposed to be brought in to the area(s) subject to Volatile Substance Abuse Management Plan(s) and provide details of the proposed methods for complying with the requirements of any applicable Volatile Substance Abuse Management Plan(s).	1.7	10 & 11		
PERMITS TO ACCESS LAND FOR WORKS ON ROADS The Contractor must provide documentary evidence of having been granted the required permission(s) to; <ul style="list-style-type: none"> – enter the land which is the site(s) of the works, and – to enter any other lands for ancillary activities related to the works, and – carry out the works and works related activities. Do not enter the land until this evidence has been received by the Superintendent	1.8	11		
PERMITS TO ACCESS LAND FOR WORKS ON ROADS Provide documented advice on sites to which surplus materials will be taken. Provide documentary evidence of permits, from the entity/entities with jurisdiction over those sites, for the dumping of surplus materials at those sites.	1.8	11		
CAMP SITE/COMPOUND/WORKSHOP Provide a copy of written permission from the owner or lessee of the land permitting establishment and operation of a camp site, compound and/or workshop, before commencing works.	1.9	12		
FOOD PREPARATION FACILITIES Provide a copy of proof of registration with DoH of any camp food preparation area in accordance with the Food Act.	1.9.1	12		
EFFLUENT Provide a copy of written approval from Department of Health (DoH) for any proposed on-site effluent disposal system, before commencing works.	1.9.3	12		
EFFLUENT Where the use of septic tanks or portable toilets is not reasonable or practical, pit toilets may be used, but this requires the prior written approval of the Superintendent.	1.9.3	12		
REHABILITATION Obtain approval from the Superintendent for the completed rehabilitation of the camp site/compound/workshop before final demobilisation.	1.9.4	12		
OPERATION OF EXTRACTION AREAS LIMIT OF EXCAVATION Obtain Superintendent approval to exceed 1ha pit size.	1.11.5	13 & 14		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	3 of 22

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
EXPLOSIVES Obtain approval from Superintendent before commencing blasting operations.	1.12	15		
WORK HEALTH AND SAFETY MANAGEMENT PLAN If the Act requires it, provide a Work Health and Safety Management Plan within 14 calendar days of award of the contract. Do not commence works until the Superintendent has advised that the Work Health and Safety Management Plan may be used.	1.14.2	16		
WORK ON RAILWAY SITES Do not commence work until the work plan has been approved by the owner and operator of the rail system.	1.16	17 & 18		
WORK NEAR TRAFFIC COUNTING STATIONS Prior to commencing any excavation, boring of holes, blasting, rock breaking, soil compaction or similar activity in the vicinity of traffic counter station detector loops, obtain the location of the cables from the Department, Transport Planning Division, Data Contracts Officer and pay all fees.	1.17	18		
AS CONSTRUCTED INFORMATION Provision of As Constructed information is a condition precedent to Practical Completion.	1.23	19		
CONTRACTOR'S SUBMISSIONS Provide copies of permits, and approvals, for works, and associated activities, proposed to be carried out in areas not in the road reserve before commencing any proposed works, and activities.	1.27	23		
02 PROVISION FOR TRAFFIC				
SUBMISSION OF TRAFFIC MANAGEMENT PLAN Submit the Traffic Management Plan (TMP), with the Traffic Guidance Schemes. For contracts where audits of traffic control measures are required: <ul style="list-style-type: none"> - Do not commence implementing traffic control measures until the TMP has been audited by a Panel Period Audit Consultant and found to be suitable. - Do not commence the works until the TMP has been audited by a Panel Period Audit Consultant and found to be suitable. For contracts where audits of traffic control measures are not required: <ul style="list-style-type: none"> - Do not commence implementing traffic control measures until the TMP has been appraised by DIPL Road Operations and found to be suitable for use. - Do not commence the works until the TMP has been appraised by DIPL Road Operations and found to be suitable for use. 	2.6.2	29		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	4 of 22

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
<p>TRAFFIC MANAGEMENT AUDIT REQUIREMENTS – SUITABILITY AUDIT REQUIREMENTS The Traffic Management Plan must not be implemented before it is audited for suitability and found to be suitable.</p>	2.8.2	33 & 34		
<p>TRAFFIC MANAGEMENT AUDIT REQUIREMENTS – SUITABILITY AUDIT REQUIREMENTS Works must not commence before the Traffic Management Plan is audited for suitability and found to be suitable.</p>	2.8.2	33 & 34		
<p>TRAFFIC MANAGEMENT AUDIT REQUIREMENTS – NOTICE OF IMPLEMENTATION Provide the Superintendent with a copies of all audit reports confirming conformance, or indicating non-conformance, with specifications, Standards, and requirements for each implemented TGS within 24 hours of implementation.</p>	2.8.6	35		
<p>TRAFFIC MANAGEMENT AUDIT REQUIREMENTS – NOTICE OF IMPLEMENTATION Provide the Superintendent with a copies of all audit reports confirming conformance, or non-conformance, with specifications, Standards, and requirements for each significant change within 24 hours of implementation.</p>	2.8.6	35		
<p>TRAFFIC MANAGEMENT AUDIT REQUIREMENTS – NOTICE OF IMPLEMENTATION The Contractor shall rectify the significant/urgent non-conformance in the time instructed by the Superintendent. If the Contractor fails to rectify the non-conformance the Superintendent may engage others to rectify the non-conformance, and the associated costs shall become a debt due and payable to the Principal.</p>	2.8.6	35		
<p>TRAFFIC MANAGEMENT AUDIT REQUIREMENTS – NOTICE OF INDEPENDENT THIRD PARTY AUDITS Notify Superintendent and submit revised TGSs & TMPs to DIPL Road Operations for appraisal.</p>	2.8.7	35		
<p>AMENDMENTS TO TRAFFIC MANAGEMENT PLANS Modified TMPs must be audited for suitability by a Panel Period Audit Consultant, or appraised by DIPL Road Operations if Traffic Management audits are not required under the contract, before implementation of the modified TMP.</p>	2.10	38		
<p>AMENDMENTS TO TRAFFIC MANAGEMENT PLANS Modified traffic management control measures must be audited for compliance by a Panel Period Audit Consultant, or appraised by DIPL Road Operations if Traffic Management audits are not required under the contract, before works resume.</p>	2.10	38		
<p>WORK IN RURAL AREAS Undertake work during daylight hours only unless approval is given by the Superintendent. Approval will only be granted in exceptional circumstances.</p>	2.11	38		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	5 of 22

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
WORK IN BUILT UP AREAS – WORKING TIMES Obtain Superintendent approval if proposing to work inside the restricted work hours.	2.12.1	38		
TRAFFIC LANES Obtain prior written approval from the relevant Local Government or Council if traffic is to be detoured onto their road network or the proposed works affects their network/assets accordingly. Provide a copy of all relevant approvals with the Traffic Management Plan.	2.12.2	39		
LANE CLOSURES Do not use bullnose or V type barriers unless no other option is available. Obtain permission from the Superintendent to use bullnose or V type barriers before placing them on site.	2.12.3	39		
NIGHT ILLUMINATION Sections of the roadway, including detours and side tracks, affected by Work Zone Traffic Management, must be illuminated at night to AS 1742.3, if night works are in progress, and/or if signage left on site overnight is not illuminated by the headlights of vehicles approaching the signs. Illumination to be 10 lux minimum at ground level.	2.13	39		
NON-STANDARD SIGNS Obtain specific approval from the Superintendent before using signs not included in AS 1742.3.	2.15.4	41		
VARIABLE MESSAGE SIGNS (VMS) Provide details of the messages to be displayed and the locations of the variable message signs. Provide wording for advance warning message(s) and wording for message(s) to be displayed during the works. Do not use any VMS until the messages to be displayed have been approved. Do not use any VMS until the proposed location and orientation of the VMS has been approved. Provide this information not less than 5 working days before the VMSs are to be put in to service for the project.	2.15.5	41 & 42		
TEMPORARY SPEED LIMITS Submit temporary speed limit authorisation applications to alter speed limits to the Superintendent, 5 working days prior to the implementation of temporary speed limits, for approval under the Control of Roads Act.	2.15.7	43		
ROAD SAFETY BARRIERS Provide a statement, signed by your engineer, and signed by the author of the Traffic Management Plan, which states that the Road Safety Barriers proposal complies with AS 1742.3, and with AS/NZS 3845.1, and with AS/NZS 3845.2, and with the specifications and installation manuals from the manufacturers of the components proposed to be used in the Road Safety Barriers system. Provide the Traffic Management Plan with this statement.	2.15.8	43 & 44		
DETOURS, SIDE TRACKS, AND CROSSOVERS Obtain written approval from the Superintendent before commencing any works.	2.18	45		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	6 of 22

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
TEMPORARY BRIDGING Obtain written approval from the Regional Manager, Road Projects prior to commencement of any such works.	2.21	47		
TEMPORARY BRIDGING Provide copies of approvals obtained by Contractor to the Superintendent prior to the commencement of the works	2.21	47		
CONTRACTOR'S PLANT AND EQUIPMENT On roads carrying significant traffic, floodlight the road and area within 50 m of the site when working at night, if approved by the Superintendent, to a ground level luminance of 10 lux minimum.	2.22	48		
TRAFFIC SIGNALS Obtain clearances from the Department's Traffic Section, ph. 8999 4402, prior to commencement of the works. Co-ordinate your works activities with the Department's Traffic Section for the duration of the works.	2.24.1	49		
REQUIREMENTS FOR WORKS CARRIED OUT DURING WORKING HOURS Provide copies of the endorsed TGSs, and contact the Traffic Section, by phone on 8999 4402, not less than one working day prior to the commencement of work.	2.24.1.1	49		
REQUIREMENTS FOR WORKS CARRIED OUT DURING WORKING HOURS If the traffic signals need to be re-mapped, advise the Traffic Section not less than one working day prior to the commencement of work. Contact should be made by email to traffic.NTG@nt.gov.au or by phone.	2.24.1.1	49		
REQUIREMENTS FOR WORKS CARRIED OUT DURING WORKING HOURS Contact the Traffic Section by phone immediately before installing traffic control on the day the works are to be carried out to advise the Traffic Section about the planned lane closures. Contact the Traffic Section immediately if unacceptable traffic congestion occurs during the works so that the Traffic Section can assist by adjusting traffic signal timings. If traffic congestion cannot be relieved by adjusting traffic signal timings it may be necessary to remove lane closures.	2.24.1.1	49 & 50		
REQUIREMENTS FOR WORKS CARRIED OUT DURING WORKING HOURS Advise the Traffic Section immediately before traffic control is removed	2.24.1.1	49 & 50		
REQUIREMENTS FOR WORKS CARRIED OUT OUTSIDE WORKING HOURS Provide copies of the endorsed TGSs, and contact the Traffic Section, not less than one working day prior to the commencement of work.	2.24.1.2	50		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	7 of 22

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
REQUIREMENTS FOR WORKS CARRIED OUT OUTSIDE WORKING HOURS If the traffic signals need to be re-mapped, advise the Traffic Section not less than one working day prior to the commencement of work.	2.24.1.2	50		
REQUIREMENTS FOR WORKS CARRIED OUT OUTSIDE WORKING HOURS Advise the Traffic Section after-hours contact officer, on the after-hours phone number provided, immediately before traffic control is removed.	2.24.1.2	50		
VARIABLE SPEED LIMIT ZONES Obtain clearances from the Department's Traffic Section, ph. 8999 4402, not less than five working days prior to commencing works.	2.24.2	50		
TRAFFIC COUNT STATIONS Prior to the commencement of work within the trafficked lanes and within 50 m of traffic signals or within 20 m, in any direction, of any component of the traffic count equipment, whether located in or on the trafficked lanes, shoulders, nature strips, and/or medians, or located in another type of area, obtain a clearance to commence the works from Department's Traffic Section for the region in which the works are located, and with either the Superintendent or with the Maintenance Manager (phone 8999 4660). Co-ordinate works activities, with the Department's Traffic Section for the region in which the works are located, for the duration of the works.	2.24.3	50 & 51		
PORTABLE TRAFFIC SIGNALS Complete and provide the Portable Traffic Signal Authorisation (PTSA) form, included in the application for a Permit to Work in the Road Reserve document, to seek formal approval from the Superintendent to use the proposed portable traffic signals and the proposed time settings, not less than 5 working days prior to the intended use of the portable traffic signals. Do not use any PTSs on site until an authorised Departmental Officer has signed off the PTSA form.	2.25	51		
TEMPORARY SPEED LIMITS Work zone speed limits require approval from the Superintendent prior to implementation.	2.25.1	52		
04 EARTHWORKS				
EXCESS MATERIAL Obtain approval from Superintendent prior to hauling, dumping and spreading excess material.	4.4.2	57		
ROCK IN SUBGRADE Obtain agreement from the Superintendent to the extent of the excavation.	4.4.3	57		

Doc ID	Version	Issued	Printed	Page
<i>1.06 Hold & Witness–SS Roadworks</i>	2019.05	November 2019	25/11/2019	8 of 22

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
UNSUITABLE MATERIAL BELOW SUBGRADE SURFACE OTHER THAN ROCK Obtain directions from the Superintendent before works commence.	4.4.4	57		
PREPARATION PRIOR TO FILLING Once moisture conditioned and compacted, subject each lot to a proof roll, with the Superintendent in attendance, as specified in the Proof Rolling sub-clause of the Conformance clause in this work section	4.5.2	58		
UNSUITABLE MATERIAL BENEATH FILL Obtain directions from the Superintendent before works commence.	4.5.4	58		
EXCAVATION - PREPARATION Obtain Superintendent's agreement with inspection record of current conditions.	4.13.2.2	64		
EXCAVATION - PREPARATION Obtain the Superintendent's approval for the foundation surface before placing the blinding concrete.	4.13.2.2	64		
PROOF ROLLING Submit a proof rolling procedure to the Superintendent for approval including the proposed method of preparing the areas, the extent of proof rolling, and details of the plant and / or equipment proposed to be used.	4.16.3	66		
CONFORMANCE TESTING Obtain the Superintendent's approval of subgrade conformance prior to placing further material.	4.16.4	66		
05 CONFORMANCE TESTING				
ITP SUBMISSION Submit: ITPs, detailing all procedures and test plans to be undertaken to complete the project, before commencing work.	5.4	69		
06 PAVEMENTS AND SHOULDERS				
PROCESS CONTROL TESTING Provide the Superintendent with a program and procedure for process control testing for the project within 14 days of the awarding of the contract and before work is commenced on site. Base the process control testing on lots and comply with the clause Conformance of Compaction of Soils in CONFORMANCE TESTING.	6.4.1	86		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	9 of 22

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
PAVEMENT ACCEPTANCE REQUIREMENTS Obtain the Superintendent's approval for pavement and shoulders acceptance prior to any surfacing work, including satisfying all requirements for: <ul style="list-style-type: none"> – Final Pavement Layer Integrity – Dry back – Proof Rolling – Conformance testing – Surface Roughness – Other Tolerances For unsealed pavements, obtain the Superintendent's approval for pavement conformance at conclusion of pavement works.	6.7.1	88		
07 STABILISATION AND MODIFICATION				
BINDER FIELD APPLICATION RATES Determine field application rate for spreading based on laboratory testing of materials. Obtain the Superintendent's approval of the field application rate for each source material for the project.	7.4.4.1	93		
GRANULAR MODIFICATION Determine blending ratios based on laboratory testing of materials. Obtain the Superintendent's approval.	7.4.6	94		
PLANT MIX STABILIZATION - BINDER CONTENT Assess the cement content based upon test results of materials to be stabilised. Obtain the Superintendent's approval for the cement content.	7.5.1	95		
CONFORMANCE TESTING Superintendent to approve conformance of stabilised layer prior to commencing surfacing work.	7.6.2	97		
08 SPRAY SEALING				
APPLICATION SPRAY RATES Do not commence spraying until the spray rates are advised by the Superintendent.	8.13.3	113		
APPLICATION OF GEOFABRIC Submit details of proposed machinery and method of application.	8.14	114		
APPLICATION OF AGGREGATE Obtain approval from the Superintendent for use of the proposed aggregate loader before commencing loading operations.	8.15	114		
SELF-PROPELLED MULTI RUBBER TYRED VIBRATING ROLLERS Obtain Superintendent's approval for the use of self-propelled multi rubber tyred vibrating rollers before using them.	8.15.4	116		
WASTE MATERIAL Obtain written approval from the Superintendent for use of rotary type brooms to windrow the loose aggregate in the urban area. Suction type brooms are still to be used to remove the waste aggregate.	8.17	116 & 117		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	10 of 22

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
09 DENSE GRADED ASPHALT				
DESIGN MIX REQUIREMENTS No asphalt shall be supplied until the mix has been registered and the Superintendent has approved the mix for use	9.6.2	123		
DESIGN MIX REQUIREMENTS Where it is proposed to change the source grading or nature of the components or binders, new mix designs must be carried out in accordance with the Department's Code of Practice for Registration of Asphalt Mix Designs.	9.6.2	123		
TEMPORARY WORKS This work must be approved by the Superintendent before the section is opened to traffic.	9.7.5	125		
LONGITUDINAL JOINTS Provide a plan showing all proposed longitudinal joints. The plan must be approved by the Superintendent prior to works depicted commencing.	9.10.7	127		
10 SLURRY SURFACING				
BINDER Additives to improve the workability of the mix, or to accelerate or retard setting of the mix may be used with the approval of the Superintendent.	10.5.1	132		
MIX DESIGN – PROCESS TESTING AND ENDORSEMENT At least 14 days before commencing work, forward the details of the mix design, and copies of test reports to the Superintendent. Testing is to be carried out in a NATA accredited laboratory and at is to be carried out at no cost to the Principal. Once the mix design is endorsed by the Superintendent it becomes the specified job mix.	10.7.2	134		
SWEEPING PAVEMENT Do not commence spreading of the slurry surfacing mix until the prepared pavement has been endorsed by the Superintendent.	10.8.1	135		
11 MISCELLANEOUS CONCRETE WORKS				
CHEMICAL ADMIXTURES Do not use admixtures without obtaining prior written approval from the Superintendent.	11.3.5	138		
REINFORCEMENT Do not place concrete until the reinforcement has been inspected by the Superintendent.	11.3.6	139		
PLACING OF CONCRETE Provide verification that all constituent materials, formwork, falsework, reinforcement, and environmental conditions comply with all requirements. Do not cast any concrete without that verification.	11.6.3	140		
EXISTING SERVICES Obtain the Superintendent's approval before altering the line or level of existing services.	11.8	142		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	11 of 22

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
12 DRAINAGE WORKS				
PRECAST REINFORCED CONCRETE BOX CULVERTS Provide drawings showing complete reinforcement and dimensions with tolerances and obtain the Superintendent's approval prior to fabricating any units. Provide manufacturer's certification that the provided culverts comply with the applicable sections of AS 5100.5 and with AS 1597. Certify that the design is reflected accurately by the shop drawings and that the design is adequate to resist all specified loads and the soil loads pertaining to the site. Provide a table of construction axle loads versus minimum required cover for each box culvert size.	12.5.3	146		
CONSTRUCTION OF CULVERTS AND STRUCTURES - SETTING OUT Obtain the Superintendent's approval for the setting out before construction.	12.6.1	147		
CONSTRUCTION OF CULVERTS AND STRUCTURES - BACKFILL Do not place backfill against any in-situ concrete structure until the concrete has attained 80% characteristic strength and approval has been given.	12.6.10	149		
INLET AND OUTLET STRUCTURES AND MAINTENANCE HOLES - LAYING AND BACKFILLING Obtain Superintendent's approval of the pipe installation before backfilling.	12.11.5	150		
13 PROTECTION WORKS				
GROUTED STONE PITCHING Obtain Superintendent's approval before grouting.	13.5.2	155		
14 ROAD FURNITURE AND TRAFFIC CONTROL DEVICES				
CERTIFICATION OF GUIDE POSTS Provide certification that guide posts conform to the following: <ul style="list-style-type: none"> – Where installed in normal working conditions, guide posts are capable of self erecting after 10 impacts head on, from an average sedan travelling at 60 kilometres per hour. – After 2,000 hours of exposure in an Atlas Weatherometer the guide posts do not change colour by more than 10 points on a Delta E colour chart. – The guide post material has a minimum vicat softening point of 120 °C. – Physical testing as specified. – Resistant to termites. 	14.6.2	163		
GUIDE POST CHARACTERISTICS Provide a sample guide post from each batch purchased for this contract for approval before installing any guide posts.	14.6.3	164		

Doc ID	Version	Issued	Printed	Page
<i>1.06 Hold & Witness – SS Roadworks</i>	2019.05	November 2019	25/11/2019	12 of 22

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
ROAD SIGNS - MATERIALS Obtain Superintendent's approval for the use of anti-graffiti film or coating products. Apply anti-graffiti products only to the new road signs specified by the Superintendent.	14.7.3	165		
ROAD SAFETY BARRIERS – WIRE ROPE SYSTEMS Obtain Superintendent's approval for any proposed Steel Wire Rope Road Safety Barrier System before ordering any components.	14.11	170		
15 PAVEMENT MARKING				
PAVEMENT MARKING PAINT Submit Certificates of Compliance, issued by an accredited testing authority, stating that all paints being used comply with, the relevant Australian Standards and/or APAS specifications.	15.5	173		
GLASS BEADS Submit Certificates of Compliance, issued by an accredited testing authority, stating that the glass beads being used comply with, the relevant Australian Standards and APAS specifications.	15.6	174		
PAVEMENT MARKING CONFORMANCE TOLERANCES Provide evidence that the pavement marking complies with the requirements of this specification.	15.9	175		
THERMOPLASTIC MATERIALS Approval from Director of Engineering and Environment Services is required before thermoplastic materials are used.	15.11	177		
COLD APPLIED PLASTIC MATERIALS Approval from Director of Engineering and Environment Services is required before cold applied plastic materials are used.	15.12	178		
AUDIO TACTILE LINE MARKING Approval from Director of Engineering and Environment Services is required before audio tactile line marking materials are used.	15.13	178		
RAISED RETROREFLECTIVE PAVEMENT MARKERS Submit details in relation the manufacturer's warranties, performance, durability and maintenance of the raised retroreflective pavement markers	15.14.1	179		
REMOVAL OF PAVEMENT MARKINGS Obtain approval from the Superintendent on the method used for pavement marking removal before commencing removal operations.	15.15	180		
PAINT BLACKOUT Obtain Superintendent's approval before using this methodology.	15.15.4	180		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	13 of 22

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
REPORTING Submit to the Superintendent the following information, in Microsoft Excel spreadsheet format, every quarter, for all works carried out under this contract: <ul style="list-style-type: none"> – CSR number (for panel contract works) – Contract number (for new works) – Date – Road number – Chainages – start point and finish point of each section of works – PRP numbers - start point and finish point of each section of works – GPS coordinates in Decimal Degrees - start point and finish point of each section of works – Type of carriageway – inbound outbound (for duel carriageways) and full width (for two way carriageway) and – Bead size used and Paint application rate. 	15.17	182		
16 LANDSCAPE				
IMPORTED SOILS Advise the name of the proposed supplier. Do not order soils without Superintendent's approval of the supplier.	16.3.4	185		
MULCH Advise the name of the proposed supplier. Do not order mulch without Superintendent's approval of the supplier.	16.3.6	185		
SETTING OUT OF HOLES Obtain approval of the set out from the Superintendent before commencing any planting.	16.5.1	187		
IRRIGATION SYSTEM Backfill trenches only after inspection and approval of wiring.	16.8.1	197 & 198		
DESIGN PLANS Submit drawings to Superintendent for approval indicating design proposals showing all pipework, sprinklers, valves and control systems.	16.8.2	198		
TESTING Obtain Superintendent's approval to proceed with backfilling other than spot filling to retain pipework from movement during pressure testing.	16.8.7	200		
18 TRAFFIC CONTROL SIGNALS AND INTELLIGENT TRANSPORT SYSTEMS				
TRAFFIC SIGNAL CABLING Submit documentation of proposed cable layout for approval prior to commencing installation of cabling.	18.5	207		
CONNECTION TO TELSTRA PIT FROM COMMUNICATIONS ISOLATION PILLAR Provide documentary evidence that the installation is approved by Telstra.	18.8.3	209		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	14 of 22

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
DOCUMENTS AND PLANS Submit to the Superintendent one complete set of As Constructed Drawings and completed Cable Layout and Connection Chart before the issue of the Certificate of Practical Completion.	18.9	209		
20 STREET LIGHTING				
TEMPORARY LIGHTING Submit plans of the proposed temporary street lighting to the Superintendent for approval prior to removal of existing street lights.	20.10.2	218		
21 DIRECTIONAL BORING				
PROPOSED METHOD Submit details of the proposed method of directional boring not less than 14 days prior to commencement of construction using that method. Include details of proposed filling of cavities. No disruption or excavation of the surface is to take place over the length nominated.	21.4	219		
DIRECTIONAL BORING WITHOUT PIPE CASING Obtain written permission from the Superintendent to use directional boring without pipe casing.	21.4.2	220		
22 PROTECTIVE COATINGS				
PROTECTIVE COATINGS Surface Preparation: To AS 1627.	22.3	223		
PROTECTIVE COATINGS Complete and submit Site testing of protective coatings: To AS 3894.10 and AS 3894.11 and AS 3894.12.	22.3	223		
ABRASIVE BLASTING At the completion of the final blast and prior to coating application, the surface profile of each item shall be measured according to Method A, Profile Replicating Tape, of AS 3894.5. Provide documentary confirmation that the surface is suitable for the application of the specified coatings. This shall be identified as a Hold Point in the contractor's ITP.	22.12.2	226 & 227		
ALTERNATE SURFACE PREPARATION Do not use forms of surface preparation other than abrasive blasting, such as bristle blaster, needle guns, power tool cleaning and hand tool cleaning, without written permission from the Superintendent. Alternate methods of surface preparation must be included in the Contractor's ITP.	22.12.4	227		
COATING Provide coating manufacturers' written approval for use before using any other additives (eg promoters, accelerators etc).	22.13.2	228		
ALTERNATE COATING Do not use coating materials other than specified, without written permission from the Superintendent. Alternate coating materials must be included in the Contractor's ITP.	22.13.6	229		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	15 of 22

SCHEDULE 1 – HOLD POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
COATING DEFECTS Provide details of repairs required and procedures and processes proposed for making the repairs to the Superintendent prior to making any repairs. Any requirements for the repair of protective coatings shall be identified as a Hold Point in the contractor's ITP.	22.13.7	229		
ITP, JSA AND SWMS Provide ITPs, JSAs, a SWMS and other quality control procedures and documents to be used during protective coating systems application. These must be approved prior to commencement of work.	22.15	229		
CONTRACTOR RECORDS Provide copies of all NCRs (Non Conformance Reports) immediately they are completed or received. The NCRs must detail the non-conformance and be accompanied by a Corrective Action Report (CAR) which is to detail the action proposed to be undertaken to rectify the non-conformance.	22.16	230		
FILM THICKNESS Final acceptance of each increment of work will not be made until the dry film thickness meets or exceeds the specified thickness. Regardless of the number of coats specified, additional coats shall be applied as may be necessary to achieve the specified thickness, at the contractor's expense.	22.16.1	230		
INSPECTOR Provide the name and qualifications of the inspector prior to commencement of work.	22.16.2	230		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	16 of 22

1.2 SCHEDULE 2 - WITNESS POINTS

SCHEDULE 2 – WITNESS POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
01 MISCELLANEOUS PROVISIONS				
CRUSHING OR SCREENING Provide documentary evidence of the certification that the plant is fit for use issued by a competent person. Provide documentary evidence of that person's skills and qualifications which indicate their competence as defined in the NT Work Safe Bulletin cited above. This evidence is to be provided within 2 weeks of the award of the contract.	1.11.3	13		
SAFETY OFFICER Appoint a Safety Officer and notify the Superintendent of the Safety Officer's name, and contact details, including an after-hours contact phone number. Ensure the Safety Officer is capable and available at all times as required.	1.14.1	16		
CONTROL STATION CHECK SURVEY Where results exceed the quoted tolerance notify the Superintendent and obtain directions.	1.21	19		
AS CONSTRUCTED INFORMATION Provide As Constructed drawings for all of the works. <ul style="list-style-type: none"> – Show co-ordinate dimensions where applicable. – Show design levels and as constructed levels on the as constructed drawings. Clearly identify on the as constructed drawings which levels are design levels and which levels are as constructed levels. – Clearly show set-out on the as constructed drawings. Show both design set-out and as constructed set-out. Show clearly which is design and which is as constructed. – Refer to the specific deliverables in the NTG Technical Drawings Part 1 - Requirements for Technical Records Management document, which is accessible via https://dipl.nt.gov.au/infrastructure/technical-standards-guidelines-and-specifications/technical-records . Drawings without changes shall be described as "As Constructed - No Changes" in the amendment description column.	1.23	19 & 20		
AS CONSTRUCTED INFORMATION Before the work commences provide a proposed procedure for recording and submitting the amended drawings.	1.23	19 & 20		
02 PROVISION FOR TRAFFIC				
TRAFFIC MANAGEMENT AUDIT REQUIREMENTS – NOTICE OF INDEPENDENT THIRD PARTY AUDITS Notify the Superintendent prior to rework arising due to failed audits.	2.8.7	35		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	17 of 22

SCHEDULE 2 – WITNESS POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
DETOURS, SIDETRACKS, AND CROSSOVERS - CONSTRUCTION Obtain advice from the Superintendent that all requirements for the construction of the detours, side tracks, and/or crossovers have been met on completion	2.18.1	45		
DETOURS, SIDETRACKS, AND CROSSOVERS - CONSTRUCTION Provide not less than 5 days notice before opening any side track, detour, or crossover, to traffic.	2.18.1	45		
04 EARTHWORKS				
EXISTING SURFACE LEVELS Obtain inspections of any disputed existing surface levels with the Superintendent prior to any stripping or earthworks operations.	4.16.1	65		
PROOF ROLLING Give the Superintendent not less than 24 hours notice of the location and commencement time for the proof rolling.	4.16.3	66		
05 CONFORMANCE TESTING				
NOTICE OF TESTING Provide the Superintendent with a copy of the order for testing simultaneously with the order being sent to the Panel Period Contractor.	5.8	70		
NOTICE OF TESTING Notify the Superintendent prior to any rework of failed lots.	5.8	70		
06 PAVEMENTS AND SHOULDERS				
PAVEMENT ACCEPTANCE – PROOF ROLLING REQUIREMENT Give the Superintendent not less than 24 hours notice of the location and commencement time for the proof rolling. Give 48hrs notice for remote work (greater than 5hrs travel one way from regional centre).	6.7.2	88		
PAVEMENT ACCEPTANCE - FINAL PAVEMENT LAYER INTEGRITY REQUIREMENT Give the Superintendent not less than 24 hours notice of the location and commencement time for the inspection of the prepared layer. Give 48hrs notice for remote work (greater than 5hrs travel one way from regional centre).	6.7.5	89		
08 SPRAY SEALING				
SAMPLING OF BINDER - COLLECTION OF SAMPLES Take samples from the point of delivery on transfer from the bulker to the sprayer or as directed. Where transfer is for works in the urban area or for small works ensure that conformance testing is ordered and samples are taken at the point of transfer from bulker to sprayer.	8.9.5	110		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	18 of 22

SCHEDULE 2 – WITNESS POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
SPRAYING Give the Superintendent 48 hours notice of intention to spray bitumen.	8.13	112		
PREPARATION FOR SPRAYER RUN Record the volume and temperature of the sprayer contents before each run, while sprayer is on level ground. Dip Sprayer Tank before and after each sprayer run. Record the dip readings, and the temperature of the sprayer contents at the time the dip was done. Provide copies of records of Sprayer Tank dips and temperatures of tank contents within one day of the completion of a day's work.	8.13.4	113		
PREPARATION FOR SPRAYER RUN Allow visual inspection when requested.	8.13.4	113		
PREPARATION FOR SPRAYER RUN Check that the spray bar is at the correct height before spraying begins.	8.13.4	113		
SPRAYSHEETS Supply spraysheets (paper or electronic formats are acceptable) to the Superintendent at the end of each day's production.	8.18.1	117		
09 DENSE GRADED ASPHALT				
BITUMINOUS BINDER Demonstrate that the binder used for asphalt manufacture has been handled according to these requirements.	9.5.4	122		
SURFACE PREPARATION - NEW CONSTRUCTION Give the Superintendent not less than 24 hours notice of the location and scheduled commencement time of surface preparation works.	9.7.1	124		
SPREADING - GENERAL Give at least 24 hours notice before commencement of asphalt material spreading.	9.10.1	126		
LAYING PATTERN Provide a construction program and paving plan at least 7 working days prior to commencement of works. Paving plans must be confirmed prior to the commencement of each shift.	9.10.4	127		
COMPACTION TEMPERATURES The Contractor must advise the Superintendent of temperature limits relating to compaction.	9.11.2	128		
10 SLURRY SURFACING				
COMMENCEMENT OF WORK Give the Superintendent at least 7 days notice of the date and time of the commencement of work.	10.3	132		
RECORDS Forward a copy of the slurry surfacing Daily Record Sheet to the Superintendent daily.	10.13	137		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	19 of 22

SCHEDULE 2 – WITNESS POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
11 MISCELLANEOUS CONCRETE WORKS				
FORMWORK Do not place concrete until the formwork has been inspected by the Superintendent.	11.6.2	140		
PLACING OF CONCRETE Give the Superintendent sufficient notice so that inspection may be made before and during pouring concrete.	11.6.3	140		
12 DRAINAGE WORKS				
PRECAST REINFORCED CONCRETE BOX CULVERTS Give the Superintendent notice prior to casting concrete.	12.5.3	146		
EXCAVATION Excavate unsuitable material below specified level if directed by the Superintendent.	12.6.2	147		
CONNECTION TO EXISTING SYSTEMS Advise the Superintendent within 2 days when cleaning out is completed.	12.6.9	148		
BACKFILL Notify the Superintendent before backfilling where holes or fissures occur in rock trenches.	12.6.10	149		
INLET AND OUTLET CHANNELS Advise the Superintendent within 2 days when cleaning out is completed.	12.8	149		
END WALLS Advise the Superintendent within 2 days of when cleaning out is completed.	12.11.6	150		
14 ROAD FURNITURE AND TRAFFIC CONTROL DEVICES				
TACTILE GROUND SURFACE INDICATORS Provide a 5 year warranty for the materials used, and for the devices installed as tactile ground surface indicators. Provide a 5 year warranty for the workmanship for the installation of the tactile ground surface indicators. Both warranties to be in the name of the Principal.	14.4	161		
15 PAVEMENT MARKING				
PAVEMENT MARKING APPLICATION Obtain approval from the Superintendent for the type of equipment to be used for applying pavement marking materials.	15.8	174		
PAVEMENT MARKING APPLICATION Produce documented evidence to show that the spraying equipment has been calibrated in accordance with PCCP requirements and is certified by PCCP as being suitable for the works to be carried out under this contract.	15.8	174		
PAVEMENT MARKING APPLICATION Obtain Superintendent's approval for variation to the any of the above requirements.	15.8	174		

Doc ID	Version	Issued	Printed	Page
1.06 Hold & Witness–SS Roadworks	2019.05	November 2019	25/11/2019	20 of 22

SCHEDULE 2 – WITNESS POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
COLD APPLIED PLASTIC MATERIALS Provide evidence that all proprietary products such as epoxy or plastic products have demonstrated satisfactory field performance for a period of at least three years.	15.12	178		
16 LANDSCAPE				
IMPORTED SOILS Provide a 5 kg sample of topsoil proposed for the works. Do not order soils without Superintendent's approval of the sample. Provide copies of delivery dockets for the topsoil delivered to site for the works.	16.3.4	185		
MULCH Provide a 5 kg sample of mulch proposed for the works. Do not order mulch without Superintendent's approval of the sample. Provide copies of delivery dockets for the mulch delivered to site for the works.	16.3.6	185		
BATTER PROTECTION BY HYDROSEEDING - CONTRACTOR SUBMISSIONS Product Data: Submit manufacturer's product data and installation instructions. Include required substrate preparation, list of materials and application rates	16.7.2	192		
BATTER PROTECTION BY HYDROSEEDING – SOIL TESTING Obtain Superintendent's approval before using additives not listed above in Composition sub-clause. Approved additives are to be applied with the hydroseeding slurry at Manufacturer recommended rates based on soil test results.	16.7.7	194		
18 TRAFFIC CONTROL SIGNALS AND INTELLIGENT TRAFFIC SYSTEMS				
INSPECTIONS Give 24 hours notice to the Superintendent for inspection of excavations for pedestals, bases and conduits.	18.5.8	208		
CHECKING AND TESTING Give 24 hours notice for checking and testing signal controller, cabling and lanterns.	18.10	209		
19 TRAFFIC COUNTING STATIONS				
DETECTOR LOOP Provide 24 hours notice to the Superintendent prior to installation of vehicle detector loops.	19.8.1	212 & 213		
TESTING AND INSPECTION - GENERAL Test the installation in the presence of the Superintendent.	19.10.1	214		
TESTING AND INSPECTION - INSPECTION Provide 24 hours notice to the Superintendent for inspection of excavations for foundations and conduits.	19.10.3	214		
20 STREET LIGHTING				
EXCAVATION - TRENCHES Notify the Superintendent when trench excavation is complete and before backfilling has commenced.	20.5.2	216		

Doc ID	Version	Issued	Printed	Page
<i>1.06 Hold & Witness–SS Roadworks</i>	2019.05	November 2019	25/11/2019	21 of 22

SCHEDULE 2 – WITNESS POINTS				
CLAUSE TITLE	SECTION	PAGE	INITIALS	DATE
21 DIRECTIONAL BORING				
DIRECTIONAL BORING WITH PIPE CASING Provide documentary evidence of the certification that the pipe jacking equipment is fit for use issued by a competent person. Provide documentary evidence of that person's skills and qualifications which indicate their competence as defined in the NT Work Safe Bulletin cited above. This evidence is to be provided within 2 weeks of the award of the contract.	21.4.1	219 & 220		
22 PROTECTIVE COATINGS				
CONTRACTOR'S RESPONSIBILITIES Provide documentary evidence of PCCP accreditation before commencing protective coatings work.	22.5	224		
EQUIPMENT Give notice so that the oil carry-over tests may be witnessed by the Superintendent or their nominated representative.	22.9.2	226		
COATING Provide copies of specifications for application of protective coatings from the manufacturers of the products used. Provide copies of manufacturers' product technical data sheets for all products used.	22.13.2	228		
COATING DEFECTS This compatibility between marker and coating is to be confirmed by the coating manufacturer. Provide written evidence of this compatibility if requested by the Superintendent.	22.13.7	229		
CONTRACTOR RECORDS Maintain written records of the work so that complete traceability of all work and materials provided under this Specification is maintained. Use the relevant sections of AS 3894.10, AS 3894.11 & AS 3894.12 QA report forms as a basis of this record keeping format for all protective coating work under this contract. Use AS 3894.13 and AS 3894.14, in addition to the preceding Australian Standards, for structural steel work coated under this contract. Maintain these reports on a daily basis. Submit them to the Superintendent when requested, or, if not specifically requested, at least weekly.	22.16	230		
FILM THICKNESS Provide and operate wet film and dry film thickness gauges of approved types to ensure the correct thickness of each coat and the full system is achieved. Provide details of the gauges proposed for use.	22.16.1	230		

Doc ID	Version	Issued	Printed	Page
<i>1.06 Hold & Witness–SS Roadworks</i>	2019.05	November 2019	25/11/2019	22 of 22