

REQUEST FOR QUOTATION (RFQ)

RFQ Reference:	Date: 22 September 2021

SECTION 1: REQUEST FOR QUOTATION (RFQ)

The Government of the Republic of Turkey has obtained a loan from the International Fund for Agricultural Development (IFAD), for the Financing of the Göksu Taşeli Watershed Development Project (GTWDP). Implemented in 11 districts and 238 villages of the Konya and Karaman provinces, the project targets 30.000 rural households, and aims to reduce rural poverty by supporting economic diversification through agricultural value chain development and sustainable natural resource management.

UNDP kindly requests your quotation for the provision of "Construction of Livestock Health and Welfare Centers" goods, works and/or services as detailed in Annex 1 of this RFQ within the scope of Göksu Taşeli Watershed Development Project.

This Request for Quotation comprises the following documents:

Section 1: This request letter

Section 2: RFQ Instructions and Data

Annex 1: Schedule of Requirements

Annex 2: Quotation Submission Form

Annex 3: Technical and Financial Offer

Annex 4: General Terms and Conditions of Contract

Annex 5: Technical Drawings

Annex 6: Form of Bid Security

When preparing your quotation, please be guided by the RFQ Instructions and Data. Please note that quotations must be submitted using Annex 2: Quotation Submission Form and Annex 3 Technical and Financial Offer, by the method and by the date and time indicated in Section 2.

It is your responsibility to ensure that your quotation is submitted on or before the deadline. Quotations received after the submission deadline, for whatever reason, will not be considered for evaluation.

Thank you and we look forward to receiving your quotations.

Issued by:

Signature: _____

Name: Sukhrob Khojimatov

Title: Deputy Resident Representative

Date: 22 September 2021

SECTION 2: RFQ INSTRUCTIONS AND DATA

Introduction	Bidders shall adhere to all the requirements of this RFQ, including any amendments made in writing by UNDP. This RFQ is conducted in accordance with the UNDP Programme and Operations Policies and Procedures (POPP) on Contracts and Procedures (POPP) (POPP) on Contracts and Procedures (POPP) (PO		
	Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of the Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this RFQ.		
	UNDP reserves the right to cancel the procurement process at any stage without any liability of any kind for UNDP, upon notice to the bidders or publication of cancellation notice on UNDP website.		
Deadline for	07 October 2021, 17:00 hrs. (GMT+3, Local time-Turkey)		
the Submission of Quotation	If any doubt exists as to the time zone in which the quotation should be submitted, refer to http://www.timeanddate.com/worldclock/ .		
Method of Submission	Quotations must be submitted as follows:		
	☑ Dedicated Email Address		
	Bid submission address: tr.procurement@undp.org		
	 File Format: PDF (in addition to PDF, Bill of Quantities shall also be submitted in EXCEL (XLS) format 		
	 File names must be maximum 60 characters long and must not contain any letter or special character other than from Latin alphabet/keyboard. 		
	 All files must be free of viruses and not corrupted. 		
	 Max. File Size per transmission: 35 MB and no more than five email 		
	 Mandatory subject of email: UNDP-TUR-RFQ(GTWDP)-2021/034 Construction of 		
	Livestock Health and Welfare Centers		
	 Multiple emails must be clearly identified by indicating in the subject line "email no. X of Y", and the final "email no. Y of Y. 		
	 It is recommended that the entire Quotation be consolidated into as few attachments as possible. 		
Cost of preparation of quotation	UNDP shall not be responsible for any costs associated with a Supplier's preparation and submission of a quotation, regardless of the outcome or the manner of conducting the selection process.		
Supplier	All prospective suppliers must read the United Nations Supplier Code of Conduct and acknowledge		
Code of	that it provides the minimum standards expected of suppliers to the UN. The Code of Conduct,		
Conduct,	which includes principles on labour, human rights, environment and ethical conduct may be found		
Fraud,	at: https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct		
Corruption,	Moreover, UNDP strictly enforces a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical or unprofessional practices, and obstruction of UNDP vendors and requires all bidders/vendors to observe the highest standard of ethics during the procurement process and contract implementation. UNDP's Anti-Fraud Policy can be found at http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_and_investigation.html#anti		
Gifts and Hospitality	Bidders/vendors shall not offer gifts or hospitality of any kind to UNDP staff members including recreational trips to sporting or cultural events, theme parks or offers of holidays, transportation, or invitations to extravagant lunches, dinners or similar. In pursuance of this policy, UNDP: (a) Shall reject a bid if it determines that the selected bidder has engaged in any corrupt or fraudulent practices in competing for the contract in question; (b) Shall declare a vendor ineligible, either indefinitely or for a stated period, to be awarded a contract if at any time it determines that the vendor has engaged in any corrupt or fraudulent practices in competing for, or in executing a UNDP contract.		

Conflict of	UNDP requires every prospective Supplier to avoid and prevent conflicts of interest, by disclosing to	
Interest	UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the	
interest	requirements, design, specifications, cost estimates, and other information used in this RFQ. Bidders	
	shall strictly avoid conflicts with other assignments or their own interests, and act without	
	consideration for future work. Bidders found to have a conflict of interest shall be disqualified.	
	consideration for factore work. Didders found to have a conflict of interest shall be disqualified.	
	Bidders must disclose in their Bid their knowledge of the following: a) If the owners, part-owners,	
	officers, directors, controlling shareholders, of the bidding entity or key personnel who are family	
	members of UNDP staff involved in the procurement functions and/or the Government of the country	
	or any Implementing Partner receiving goods and/or services under this RFQ.	
	The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP's	
	further evaluation and review of various factors such as being registered, operated and managed as	
	an independent business entity, the extent of Government ownership/share, receipt of subsidies,	
	mandate and access to information in relation to this RFQ, among others. Conditions that may lead to	
	undue advantage against other Bidders may result in the eventual rejection of the Bid.	
General	Any Purchase Order or contract that will be issued as a result of this RFQ shall be subject to the	
Conditions	General Conditions of Contract	
of Contract	Select the applicable GTC:	
	⊠ General Terms and Conditions for Works	
	Applicable Terms and Conditions and other provisions are available at <u>UNDP/How-we-buy</u>	
Liquidated	Will be imposed as follows:	
Damages		
	Percentage of contract price per day of delay beyond 60 calendar days after given access to the Site:	
	0,50%	
	Max. number of days of delay is 20, after which UNDP reserves the right to terminate the contract	
	i wax. Humber of days of delay is 20, after which onder reserves the right to terminate the contract	
Eligibility	A vendor who will be engaged by UNDP may not be suspended, debarred, or otherwise identified as	
,	ineligible by any UN Organization or the World Bank Group or any other international Organizati	
	Vendors are therefore required to disclose to UNDP whether they are subject to any sanction or	
	temporary suspension imposed by these organizations. Failure to do so may result in termination of	
	any contract or PO subsequently issued to the vendor by UNDP.	
	It is the Bidder's responsibility to ensure that its employees, joint venture members, sub-contractors,	
	service providers, suppliers and/or their employees meet the eligibility requirements as established	
	by UNDP.	
	Bidders must have the legal capacity to enter a binding contract with UNDP and to deliver in the	
	country, or through an authorized representative.	
Currency of	Quotations shall be quoted in Turkish Lira (TRY)	
Quotation	and the state of t	
Joint	Not allowed.	
Venture,		
Consortium		
or		
Association		
Only one Bid	The Bidder shall submit only one Bid.	
	Rids submitted by two (2) or more Ridders shall all be rejected if they are found to have any of the	
	Bids submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the	
	following:	
	a) they have at least one controlling partner, director or shareholder in common; or b) any one of	
	them receive or have received any direct or indirect subsidy from the other/s; or	
t	I.	

b) they have the same legal representative for purposes of this RFQ; or

c) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Bid of, another Bidder regarding this RFQ process;

d) they are subcontractors to each other's Bid, or a subcontractor to one Bid also submits another Bid under its name as lead Bidder; or

e) some key personnel proposed to be in the team of one Bidder participates in more than one Bid received for this RFQ process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Bid.

Duties and taxes

Article II, Section 7, of the Convention on the Privileges and Immunities provides, inter alia, that the United Nations, including UNDP as a subsidiary organ of the General Assembly of the United Nations, is exempt from all direct taxes, except charges for public utility services, and is exempt from customs restrictions, duties, and charges of a similar nature in respect of articles imported or exported for its official use. All quotations shall be submitted net of any direct taxes and any other taxes and duties, unless otherwise specified below:

All prices must:

☑ be exclusive of VAT and other applicable indirect taxes

It is the Proposer's responsibility to learn from relevant authorities (Ministry of Treasury and Finance) and/or to review/confirm published procedures and to consult with a certified financial consultant as needed to confirm the scope and procedures of VAT exemption application as per VAT Law, Ministry of Treasury and Finance's General Communiqués. The Contractor to be selected shall not be entitled to receive any amount over its proposal price in relation to VAT. Overall contract amount to be paid to the contractor shall not exceed the offered Total Financial Proposal Price.

UNDP will provide the contractor a VAT exemption certificate covering the subject procurement.

Language of quotation

English

All documents including catalogs, instructions and user manuals.

Please note that Turkish version of this RFQ and its Annexes are given only for information purposes. In case of an inconsistency between Turkish and English versions, the English version shall prevail.

Previous Experience

Minimum three years of experience in the Construction Field.

In order to be considered qualified, the Bidder must have successfully completed, as the prime contractor, minimum one civil works contract of similar nature (i.e. construction any kind of building and/or steel construction) at minimum contract amount of **500,000 TRY** over the **last three years counting back from the bid submission deadline**.

Bidders shall substantiate the claimed experiences by presenting copies of Satisfactory Work Completion Certificates from Clients demonstrating nature and value of the civil work successfully completed.

Work Completion Certificate shall include following information at minimum:

- -Project name & Country of Assignment
- -Client & Reference Contact Details
- -Contract Value (in USD equivalent*)
- -Period (dates) of activity and status
- -Types of activities undertaken

*Bidder shall convert the currency quoted in the Satisfactory Work Completion Certificates into TRY, in accordance with the prevailing UN operational rate of exchange on the contract signature date. UN

	operational rates of exchange are available at the following website: https://treasury.un.org/operationalrates/OperationalRates.php#E				
	UNDP reserves the right to request submission of originals of all proof documents (such as contracts, invoices, acceptance reports etc.) as well as further information/documentation from both the bidder and its clients.				
Financial	Minimum average annual turnover of 500,000 TRY for the last 3 years (2018, 2019 and 2020)				
Standing Key					
Technical Staff	Min 5 years experienced Civil Engineer.				
Bid security	Required in the amount of TRY 15,000.00				
	Acceptable Forms of Bid Security: Bank Guarantee (See Annex 6, Form for the template)				
	Bid Security shall be in English as per the template				
	Currency of the Bid Security shall be in TRY as per the amount indicated above				
	No change shall be made to the template except for fields indicated in the template Rid Security shall be valid until 20 days after the expire of Rid Validity Period (i.e., 120 days after				
	Bid Security shall be valid until 30 days after the expiry of Bid Validity Period. (i.e., 120 days after bid submission deadline)				
	Original Bid Security shall be delivered to the below address on or before the submission deadline				
	indicated within this RFQ, with a PDF copy submitted as part of the electronic submission.				
	Focal Point: Koray Çeyrek, Procurement Officer				
	Yukari Dikmen Mahallesi, Yıldız Kule, 21st Floor, Turan Güneş Bulvarı Nr:106, 06550, Çankaya, Ankara, Turkey				
Performance Security	The successful bidder will be asked to provide a performance security of 10% of the contract price at the signing of the contract. This security must be provided no later than 15 days after the bidder receives the award letter by the UNDP. If the selected bidder fails to provide such a security within this period, the contract will be void and a new contract may be drawn up and sent to the tenderer which has submitted the next cheapest compliant tender.				
	The Performance Security must be issued by an accredited bank, in the format included in Appendix I to UNDP General Conditions of Contract for Civil Works and must be valid up to twenty-eight days after issuance of the Certificate of Final Completion. The Performance Security will only be released upon the issuance of Certificate of Final Completion in accordance with the Clause 10 of the UNDP General Conditions of Contract for Civil Works.				
Documents	Bidders shall include the following documents in their quotation:				
to be submitted	Annex 2: Quotation Submission Form duly completed and signed				
Submitted	☑ Annex 3: Technical and Financial Offer duly completed and signed and in accordance with the Schedule of Requirements in Annex 1				
	☐ Trade Registry Gazette showing the establishment and shareholder structure of the company;				
	∀alid Chamber of Commerce Registration Certificate (Original documents may be requested by				
	UNDP and shall be presented when requested)				
	☐ Copy of Signature Circular/Power of Attorney (Original documents may be requested by UNDP				
	and shall be presented when requested)				
	Brochure/catalog of the offered products or link to web sites where these documents can be				
	seen to demonstrate compliance with technical specifications				
	Signed and Stamped copy of ANNEX 4- General Terms and Conditions for Contracts Appear 6: Rid Security shall be provided in the amount indicated in this REO and form in Appear 6.				
	☑ Annex 6: Bid Security shall be provided in the amount indicated in this RFQ and form in Annex 6				
	☑ Annex 6: Bid Security shall be provided in the amount indicated in this RFQ and form in Annex 6 Bid Security Form				
	☑ Annex 6: Bid Security shall be provided in the amount indicated in this RFQ and form in Annex 6				

Quotation	Quotations shall remain valid for 90 days from the deadline for the Submission of Quotation.	
validity		
period		
Price	No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market	
variation	factors shall be accepted at any time during the validity of the quotation after the quotation has been	
	received.	
Partial	Not permitted ■	
Quotes		
Alternative	Not permitted ■	
Quotes		
Payment	The contract is based on unit price, and the final price of the Contract will be determined on the basis	
Terms	of actual quantities of work and materials utilized in the complete and satisfactory performance of the	
	Works as certified by the Engineer and the unit prices contained in the Contractor's financial proposal.	
	Such unit prices are fixed and are not subject to any variation whatsoever. Unless the technical	
	specifications or the Bill of Quantities specifically and expressly state otherwise, only permanent works	
	are to be measured and paid for by UNDP.	
	The Contractor shall submit the invoice (reflecting the work performed and materials utilized as	
	accepted by UNDP through the "Final Report"). UNDP shall effect payment of the invoices after receipt	
	of the certificate of payment issued by the Engineer, approving the amount contained in the report	
	and the invoice. The Engineer may make corrections to that amount, in which case UNDP may effect	
	payment for the corrected amount. The Engineer may also withhold invoices if the work is not	
	performed at any time in accordance with the terms of the Contract or if the necessary insurance	
	policies or performance security are not valid and/or in order. The Engineer shall process the invoi	
	submitted by the Contractor within 15 days of their receipt.	
	Invoice will be paid within thirty (30) days of the date of their receipt and acceptance by UNDP.	
	Advance payment upto 20 % of the contract price will be made to the Contractor. The Contractor	
	should submit additional performance quarantee for the amount of advance payment in order to	
	claim for the advance payment	
	Country of the davance payment	
	Currency of Payment:	
	The payment shall be realized in Turkish Liras (TRY).	
Conditions	☑ Written Acceptance of Works, based on full compliance with RFQ requirements. (Monthly	
for Release	Progress Payment)	
of		
Payment		
Contact	E-mail address: tr.procurement@undp.org	
Person for		
corresponde	Att: Mr. Güray Balaban, Civil Works Procurement and Contracts Officer	
nce,		
notifications	, , , , , , , , , , , , , , , , , , , ,	
and	unless UNDP determines that such an extension is necessary and communicates a new deadline to the	
clarifications	'	
Clarifications	, , , , , , , , , , , , , , , , , , , ,	
Evaluation	submission deadline.	
method	☐ The Contract will be awarded to the lowest price substantially compliant offer	
Evaluation	☐ Full compliance with all requirements as specified in Annex 1	
criteria	□ Full acceptance of the General Conditions of Contract	

	1				
Right not to accept any	UN DP is not bound to accept any quotation, nor award a contract or Purchase Order				
quotation					
Right to vary	At the time of award	of Contract or Purchase C	Order, Click or tap here	to enter text. res	erves the right
requirement		ecrease) the quantity of s			_
at time of		total offer, without any	_		
award	per cent (25%) or the	total offer, without any	mange in the unit price	or other terms a	na conditions.
Type of		<u>ss</u>			
Contract to					
be awarded					
Time for		ting from the date on wh		be given Access to	o the Site and
completion	receive a notice from	the Engineer to commen	ce the Works.		
Expected	October 2021				
date for					
contract					
award.					
Publication	UNDP will publish the	contract awards valued	at USD 100,000 and mo	re on the website	es of the CO
of Contract	and the corporate UN		,		
Award		 -			
Policies and	This REO is conducted	d in accordance with UND	P Programme and One	rations Policies ar	nd Procedures
procedures	ins m Q is conducted	a in accordance with OND	i i rogramme and Ope	rations rolles di	ia i rocedures
UNGM	Any Contract recultin	g from this RFQ exercise	will be subject to the	cupplior boing ro	rictored at the
	-	_	•		
registration	7 7 7	the United Nations Globa			
	-	ubmit a quotation even if	_		
		ct award, the Bidder mus			
Site Visit		ed to visit the site and far		_	
	building prior to sub	mitting their offer. UNDP	shall not make any ar	rangements for a	site visit. For
	bidders who would I	ike to be informed about	the location of the sit	te, or visit the sit	e at their own
	expense, the address	is given below:			
	Province	District	Village	Block	Plot
	Konya	Akören	Çatören	218	1
	Konya	Güneysınır	Aydoğmuş	0	399
	Konya	Curreysiiii	/ tydoginaş		1 333
	It is the hidders' resn	onsibility to consider Covi	d-10 related ricks in th	a casa thay visit t	he locations of
		above. UNDP is not respor		•	
			isible for ally covid-19	i ciated events and	u ileaitii issues
Carriel 40		and after the site visits.	II + I + - £ I INI	LINDD	
Covid 19		iew all local regulations, a			
Specific		g performance of the co		r COVID-19, befor	e tney submit
Measures		relevant costs, if any, to the			
	The Contractor shall take all measures against COVID-19 imposed by local regulations as well as by UN				
	and UNDP during performance of the contract to protect health and social rights of its own personnel,				
	as well as UNDP personnel, Project Stakeholders and third parties.				
	As per "Clause 12- I	ndemnification" of UNDF	General Terms and G	Conditions for Co	ntracts* , the
	Contractor shall inde	mnify, defend, and hold	and save harmless, UN	DP, and its officia	ils, agents and
	employees, from and	against all suits, proceedi	ngs, claims, demands, l	losses and liability	of any kind or
		y third party against UND	=	•	
				and Conditions.	UNDP shall
	With respect to above indemnification clause of UNDP General Terms and Conditions, UNDP shall not be held accountable for any Covid 19 related health risks or events that are caused by negligence				
	of the Contractor and/or any other third party.=.				
Contingency	The contingency allowance to manage variations for the unforeseen and unknown additional				
and	components of Works within the overall general scope is maximum 15% of the contract price.				
variations	However, it shall only be accessed by the Contractor upon the approval by the Engineer, who will				
	obtain prior approval from UNDP as the Employer.				
	The project engineer (employer's representative) may use this contingency with no additional				
	procurement process	to manage variations wit	h the approval of UND	P. Any variation tl	hat utilizes the
			-		

	contingency but is not covered by rates in the BOQ or schedule of rates shall be subject to a value for	
	money analysis by the Engineer and UNDP.	
	The contingency allowance shall not be used to compensate the Contractor for its fault to include	
	required items in the Bill of Quantities as per Schedule of Requirements/Technical Specifications or	
	unreasonably low unit prices of one or more of the items included in the submitted Bill of Quantities.	
Insurance of	For all risks stipulated by Clause 21 of UNDP General Conditions of Contract for Civil Works for the	
work	110 % of the total estimated price of the Contract.	
Liability	Minimum amount of liability insurance (Clause 23 of UNDP General Conditions of Contract for Civil	
Insurance	Works) is 15% of the total estimated price of the Contract.	

ANNEX 1: STATEMENT OF WORKS

ANIMAL WEALTH AND HEALTH CENTERS IN KONYA PROVINCE

TECHNICAL SPECIFICATIONS

KONYA İLİ HAYVAN REFAHI ve SAĞLIĞI MERKEZLERİ

TEKNİK ŞARTNAME

Within the scope of "Construction of Livestock Health and Welfare Centers", One in Aydoğmuş neighborhood of Güneysınır district, one in Çatören neighborhood of Akören district of Konya Province n2 similar facilities will be established. In the facilities, shearing, parasite spraying, vaccination, weighing and loading-unloading works of sheep and goats will be carried out.

"Hayvan Sağlığı ve Refah Merkezleri İnşaatı" kapsamında biri Güneysınır ilçesine bağlı Aydoğmuş mahallesinde, diğeri Konya ili Akören ilçesine bağlı Çatören mahallesinde 2 adet benzer tesis kurulacaktır. Tesislerde koyun ve keçilerin kırpma, parazit ilaçlama, aşılama, tartım ve yükleme-boşaltma işleri yapılacaktır.

1. LOCATION // KONUM (MAHAL) BİLGİLERİ

Province // il	District // ilçe	Village // Mahalle	Block // Ada	Plot // Parsel
Konya	Akören	Çatören	218	1
Konya	Güneysınır	Aydoğmuş	0	399

Note: Konya GTWDP Provincial Project Management Unit may change the coordinates in the location data above without changing the neighbors.

Not: Konya GTHKP İl Proje Yürütme Birimi yukarıdaki konum bilgilerinde bulunan mahalleler değiştirilmeden koordinatlarda değişiklik yapabilir.

2. SPECIAL CONDITIONS // ÖZEL ŞARTLAR

- 2.1 The duration of the work is 60 calendar days. İşin süresi 60 takvim günüdür.
- 2.2 The Contractor shall submit the work program to the Management within 5 (five) working days from the site delivery. All processes, including quantity revisions and approval, material procurement times and approvals, will be described in detail in the work program. Yüklenici yer tesliminden itibaren 5 (beş) iş günü içerisinde iş programını İdare'ye sunacaktır. İş programında tip proje hazırlanması ve onayı, metraj revizyonları ve onayı, malzeme tedarik süreleri ve onayları dahil olmak üzere tüm süreçler ayrıntılı olarak tanımlanacaktır.
- 2.3 No transportation costs (transports to be made for material supply, horizontal or vertical transportations within the facility, etc.) will be paid for any production within the scope of this contract. Bu sözleşme bünyesinde hiçbir imalat için herhangi nakliye bedeli (malzeme temini için yapılacak taşımalar ile tesis içi yatay veya düşey taşımalar vb) ödemesi yapılmayacaktır.
- 2.4 A civil engineer with at least 5 years of experience will be employed as the site supervisor. *Şantiye şefi olarak en az* 5 yıl tecrübeli inşaat mühendisi istihdam edilecektir.
- 2.5 Crew and Machine-Equipment List Ekip ve Makine-Ekipman Listesi
 - ✓ 2 Iron Joinery and Welding Teams (will consist of 2 masters and 4 non-skilled workers) 2 adet Demir Doğrama ve Kaynak İşleri Ekibi (2 usta ve 4 düz işçiden oluşacaktır)
 - ✓ 2 pieces of JCB Type Bucket 2 adet JCB Tip Kepçe

- ✓ 2 Pickup Truck 2 adet Kamyonet
- ✓ 2 Welding Machines 2 adet Kaynak Makinası
- ✓ 2 Water Tanks 2 adet Su Tanki Note: In order to ensure that the work is completed on time, the Administration may ask the Contractor to increase the number of teams when it deems necessary.

Not: İşin süresinde tamamlanmasını temin etmek için İdare gerekli gördüğü durumlarda ekip sayısının artırılmasını Yükleniciden isteyebilir.

- 2.6 For each location, one-way signs, 150x100 cm in size, with two legs and at least 50 cm deep to the ground, will be fixed with concrete. Sign designs will be made by the Management and no payment will be made for the signs. Her bir mahal için 150x100 cm ölçülerinde, iki ayaklı ve zemine en az 50 cm derinliğinde betonla sabitlenecek tek yönlü tabelalar konulacaktır. Tabela tasarımları İdare tarafından yapılacak ve tabelalar için herhangi bir ödeme yapılmayacaktır.
- 2.7 The contractor shall inform the control engineer before starting the material productions in the factory or workshop. Material control will be carried out at the factory when the control engineer deems it appropriate. Materials that are not deemed appropriate by the control engineer will not be used in the construction. Yüklenici, fabrika veya atölyedeki malzeme imalatlarına başlamadan önce kontrol mühendisini bilgilendirecektir. Kontrol mühendisinin uygun gördüğü zamanlarda fabrikada malzeme kontrolü yapılacaktır. Kontrol mühendisi tarafından uygun görülemeyen malzemeler inşaat bünyesinde kullanılmayacaktır.
- 2.8 All of the painting stages (preparation, anticorrosion and epoxy painting) of profile manufacturing in the workshop will be photographed and presented to the control engineer. *Profil imalatlarının atölyedeki boyama aşamalarının* (hazırlık, antipas ve epoksi boyama) tamamı fotoğraflandırılarak kontrol mühendisine sunulacaktır.
- 2.9 The Contractor shall prepare a material approval form in the format given by the Administration and submit the TSE and quality certificates of all kinds of materials to be used in the construction to the control engineer before starting work. Yüklenici, İdare tarafından verilen formatta malzeme onayı formu hazırlayacak ve ekinde işe başlamadan önce inşaat bünyesinde kullanacağı her türlü malzemenin TSE ile kalite belgelerini kontrol mühendisine ibraz edecektir.
- 2.10 Progress payments are issued within the first 5 (five) working days of each month. The test result reports described in the relevant standards for concrete, steel and other materials will be included in the progress payment annexes. Hak edişler her ayın ilk 5 (beş) iş günü içerisinde düzenlenir. Beton çelik ve diğer malzemeler için ilgili standartlarda tarif edilen test sonuç raporları hak ediş eklerine konulacaktır.
- 2.11 For the backfilling (insides of buildings, inside ramps, sides of large poles etc.) requested by the Administration, the material of appropriate quality from the excavation will be selected and compacted using a compactor. No additional payment shall be made to the contractor for this work. İdare tarafından istenen geri dolgular (bina içleri, rampa içi, büyük direk yanları vb) için kazıdan çıkan uygun evsaftaki malzeme seçilecek kompaktör kullanılarak sıkıştırılacaktır. Bu iş için yükleniciye ayrıca bir bedel ödenmeyecektir.
- 2.12 Electrical works, which are not seen in the projects and site lists, but which are required to be made technically for the operation of the system, will be made by the contractor company without any additional cost. *Elektrik işlerinde projelerde ve mahal listelerinde görülmeyen ancak sistemin çalışması için teknik yönden yapılması zorunlu imalatlar, yüklenici firma tarafından ilave bedel talep edilmeksizin yapılacaktır.*
- 2.13 Paddock locks, hinges, etc., all kinds of auxiliary elements, etc., which are not included in the unit price scale. (even if they are not metal) payment is made by weighing over the profile weights. Birim fiyat cetvelinde yer almayan padok kilitleri, menteşeleri vb. her türlü yardımcı elemanların vs. (madeni olmasalar dahi) ödemesi, profil ağırlıkları üzerinden tartım suretiyle yapılır.
 - 3. PORTABLE RAMP TECHNICAL SPECIFICATIONS // KÜÇÜKBAŞ HAYVAN PORTATİF RAMPA TEKNİK ŞARTNAMESİ (HRSM-CIV-14)

3.1 Measures // Ölçüler

Length // Uzunluk	220 cm
Width // Genişlik	58 cm
Height // Yükseklik	58 cm

Base // Taban	2/3 mm diamond patterned sheet metal // baklava desenli sac	
Paint // Boya	Hot dip galvanising or non-scratchable, cured electrostatic powder coating // Sıcak	
	daldırma galvaniz veya elektrostatik çizilmez fırın boya	

3.2 List of Materials // Malzeme Listesi

Part	Qty	Material	Length	Description
No	(pcs)	Malzeme	Parça	Açıklama
Parça	Miktar		uzunluğu	
No	(adet)		(mm)	
1	1	30x30x1.5 square hollow section //	1100	
		kare profil		
2	2	30x30x1.5 square hollow section //	2170	End joining with Part no 3 to be cut at 45° // 3
		kare profil		nolu parça ile birleşim ucu 45° kesilecek
3	1	30x30x1.5 square hollow section //	580	End joining with Part no 2 to be cut at 45° // 2
		kare profil		nolu parça ile birleşim uçları 45° kesilecek
4	2	25x25x1.5 square hollow section //	2140	
		kare profil		
5	4	25x25x1.5 square hollow section //	1100	
		kare profil		
6	14	25x25x1.5 square hollow section //	2145	Both ends to be cut at 20° // İki ucu 20°
		kare profil		kesilecek (Diyagram-2)
7	4	40x10 sheet bar // lama demir	75	
8	8	25x10 sheet bar // lama demir	25	
9	4	25x8 sheet bar // lama demir	95	
10	1	25x5 sheet bar // lama demir	580	

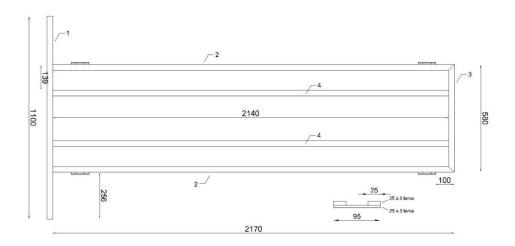
3.3 Construction (Assembly) Stages // Yapım (Montaj) Aşamaları

- a. Parts indicated in the list shall be separately cut and prepare, and part numbers written on each.
- a. Listede belirtilen parçalar ayrı ayrı kesilip hazırlanacak ve üstlerine parça numaraları yazılacaktır.
- b. Part no's 1, 2 and 3 shall be joined and welded as shown in Diagram-1
- b. Diyagram 1'de gösterildiği gibi 1,2 ve 3 nolu parçalar bir araya getirilip kaynatılacaktır

Ramp Perspective View Rampa Perspektif Görünüşü



Diagram-1 (floor) // Diyagram-1 (taban)



- c. As shown in Diagram-2, two pieces of Part no 5 and seven pieces of Part no 6 shall be joined and welded.
- c. Diyagram 2'de gösterildiği gibi 5 nolu parçadan iki adet ile 6 nolu parçadan 7 adet bir araya getirilip kaynatılacak.
- d. The other part of the railing shall be constructed as described in the previous step.
- d. Korkuluğun diğer parçası da bir önceki adımda belirtildiği gibi imal edilecektir.

Diagram-2 (railing) // Diyagram-2 (korkuluk)

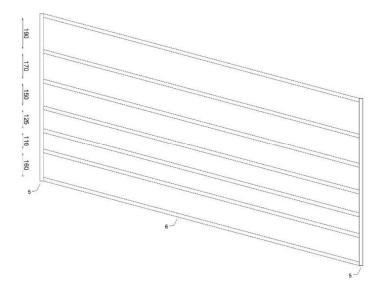
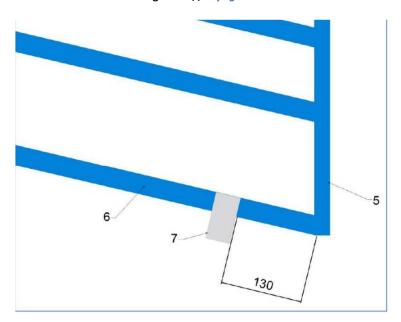
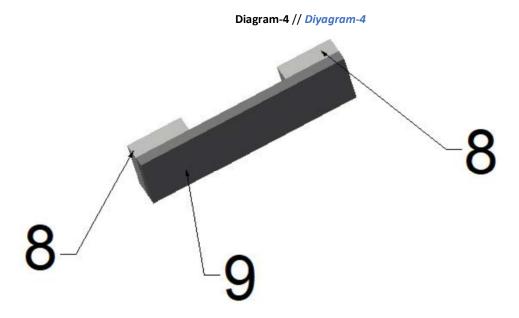


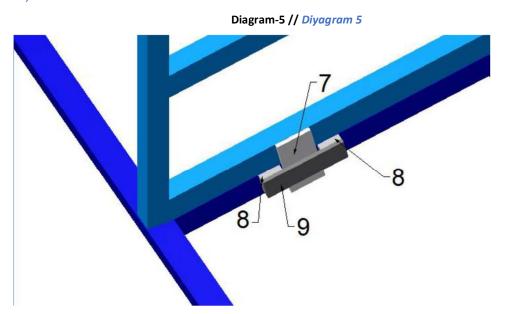
Diagram-3 // Diyagram-3



- e. As shown in Diagram-3, Part no 7 shall be welded to the outer edges of Part no 6.
- e. Diyagram-3'de gösterildiği gibi 7 nolu parça 6 nolu parçanın dış kenarlarına kaynatılacaktır.
- f. Prepared flat sheet metals of 2/3 mm in thickness shall be welded inside the lower parts of railings.
- f. Korkulukların alt kısımlarının iç taraflarına önceden hazırlanmış olan 2/3 mm kalınlığındaki düz saclar kaynatılacaktır.
- g. Part no's 8 and 9 shall be welded as a group as shown in Diagram-4.
- g. 8 ve 9 nolu parçalar Diyagram-4'de gösterildiği gibi toplamda 4 grup halinde kaynatılacaktır.

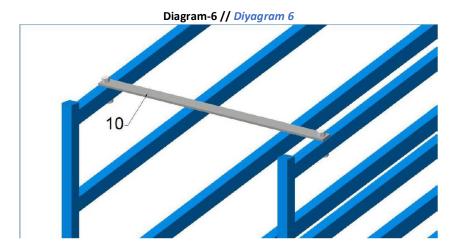


- h. The prepared part group of Part nos 8 and 9 shall be welded at 4 points to other parts as shown in Diagram-5.
- h. Önceden mal edilen 8 ve 9 nolu parçalar grubu, Diyagram-5'de gösterildiği gibi 4 noktada diğer parçalara kaynatılacaktır.

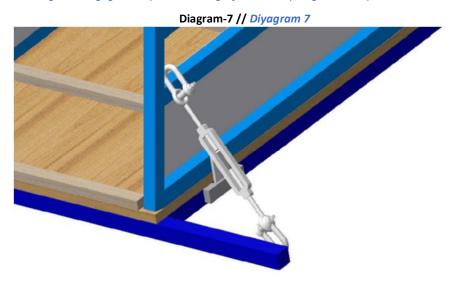


- i. The 2/3 mm diamond patterned sheet metal shall be assembled to the floor by rivets and welding.
- i. 2/3 mm kalınlığındaki baklava desenli sac, tabana perçin ve kaynakla monte edilecektir.
- j. A hole of 8.5 mm in diameter shall be punched at both ends of Part no 10. The centres of the holes shall be 12 mm from the part's ends.
- j. 10 nolu parçanın her iki ucundan 8,5 mm çapında delik açılacaktır. Açılacak deliklerin merkezinin parça uçlarına mesafesi 12 mm olacaktır.
- k. Part no 10 shall be placed as shown in Diagram-6, and fixed at two spots by M8x75 mm nuts and bolts.

k. Diyagram-6'da gösterildiği gibi 10 nolu parça yerleştirilecek ve M8x75 mm'lik cıvata ve somunlarla iki yerden sabitlenecektir.

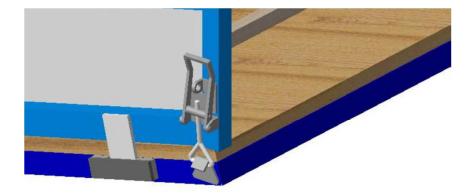


- I. Ringbolt tensioning devices shall be installed at both inlet ends of the ramp as shown in Diagram-7.
- I. Diyagram-7'de gösterildiği gibi rampanın her iki giriş ucuna mapalı gerdirme aparatları monte edilecektir.



- m. Latches shall be installed at both outlet ends of the ramp as shown in Diagram-7.
- m. Diyagram-8'de gösterildiği gibi rampanın her iki çıkış ucuna mandallar monte edilecektir.

Diagram-8 // Diyagram 8



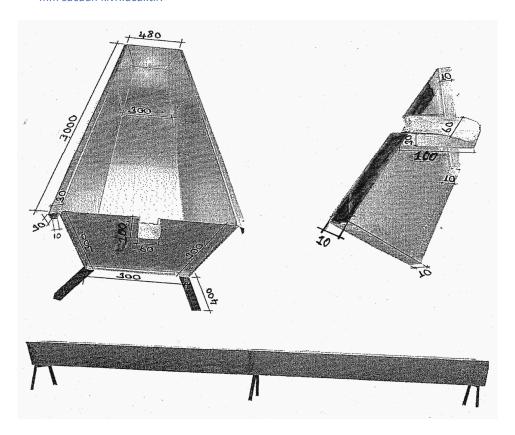
- n. Top gaps of pieces of Part no 5 by 25x25 plastic plugs.
- n. 5 nolu parçaların üst boşlukları 25x25 plastik tapa kapatılacaktır.
- o. To prevent run-back following the completion of loading, the Contractor shall design and install a safety control door mechanism.
- o. Yükleme işleme tamamlandıktan sonra geri kaçışları önlemek için yüklenici tarafından emniyet kontrol kapı mekanizması tasarlanıp, yapılacaktır.
- p. As a result of the operations described above, the portable ramp shall have dismountable 3 parts namely two side railings and a floor.
- p. Yukarıda yapılan işlemler sonucu, portatif rampa iki yan korkuluk ve bir taban olmak üzere 3 parça halinde sökülüptakılabilir şekilde olacaktır.

4. TECHNICAL SPECIFICATIONS FOR CONSTRUCTING WATERING TROUGHS OF GALVANISED SHEET METAL // GALNANIZLI SACDAN SEYYAR SIVAT YAPIMI TEKNİK ŞARTNAMESİ (HRSM-CIV-15)

Construction Requirements // Yapım Şartları

- a. Galvanized sheets shall have thickness of 2 mm. Carrying stands of 30x30mm of angle iron shall be constructed at both ends and at the mid-section welded underneath the processed galvanized sheets. The welding of carrying stands shall be robust.
- a. Galvanizli Sacların kalınlığı 2 mm olacaktır. İşlenmiş Galvanizli Sacların iki başına ve ortasına şekilde görüldüğü gibi alttan kayıtlı 30x30mm'lik köşebent demirinden taşıyıcı ayak yapılacaktır. Taşıyıcı ayakların kaynakları mukavim olacaktır.
- b. Edges of processed galvanised sheets shall be curved 1 cm as shown in the figure and one shall have a drain gutter at specified dimensions. There shall be a drain plug of 1 inch in diameter underneath the section where the drain gutter is located.
- b. İşlenmiş Galvanizli Sac kapaklarının kenarları şekilde görüldüğü gibi 1 cm kıvrılacak ve bir tanesine belirtilen ölçülerde tahliye oluğu yapılacaktır. İşlenmiş Galvanizli Sacların tahliye oluğu bulunan tarafına alttan 1 inç çapında körtıpa ile boşaltma tapası yapılacaktır.
- c. Gas welding shall be used for welding sites on the processed galvanized sheets; watertightness shall be ensured at welding sites and painted with galvanized paint that prevents corrosion.
- c. İşlenmiş Galvanizli Sacların kaynak yerlerinde gaz altı kaynağı kullanılacak, kaynak noktalarında sızdırmazlık sağlanarak, kaynak yerleri paslanmayı önleyici galvanizli boya ile boyanacaktır.
- d. Processed galvanized sheets shall have the caption "GÖKSU TAŞELI WATERSHED DEVELOPMENT PROJECT" in large fonts (20 to 25 cm), red non-water-soluble paint along the outer edges.

- d. İşlenmiş Galvanizli Sacların dışa gelen uzun kenarlarına "GÖKSU-TAŞELİ HAVZASI KALKINMA PROJESİ" ibaresi, büyük puntolu (20-25 cm.) kırmızı renkli, suda çözünmeyen boya ile yazılacaktır.
- e. Processed galvanized sheets shall have a length of 3,000 mm. They shall be curved out of single-piece 3,000mm sheets.
- e. İşlenmiş Galvanizli Sacların uzunluğu 3000 mm olacaktır, ekleme yapılmayacaktır. Galvanizli Saclar tek parça 3000 mm sacdan kıvrılacaktır.



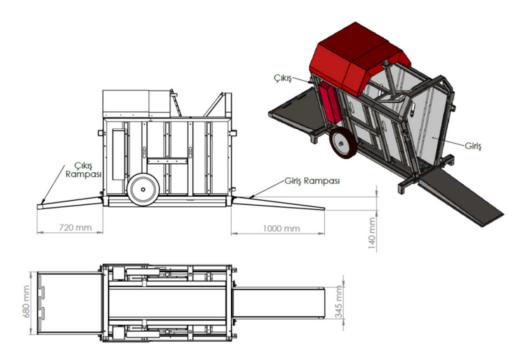
5. TECHNICAL SPECIFICATIONS FOR SMALL LIVESTOCK BATHING MACHINE // KÜÇÜKBAŞ HAYVAN YIKAMA MAKİNASI TEKNİK ŞARTNAMESİ (HRSM-MEC-01)

- a. The machine shall be attachable to any vehicle with a tower (such as tractor, triporter, mini-tractor etc), and two deployable/retractable wheels of 30 cm in diameter on the sides for moving.
- a. Tüm sistem çekici sitemi olan herhangi bir araca (traktör, triportör, el traktörü vb.) bağlanabilir olmalı ve makinenin taşınabilmesi için yan taraflarında min. 30 cm çapında 2 adet inip kalkabilen tekerlek bulunmalıdır.
- b. The machine's dimensions shall comply with the conceptual drawings given in the technical specifications. Proposals for amendment may be applied if approved by the Employer.
- b. Makinenin ölçüleri teknik şartnamede verilen konsept projelerle uyumlu olacaktır. Değişiklik teklifleri, İdare tarafından uygun görüldüğü takdirde uygulanabilir.
- c. The bathing capacity shall be 1.500 animals of small livestock per hour on average for spraying/bathing, and the performance shall be documented by a test report from an accredited institution.
- c. Yıkama kapasitesi, saatte ortalama 1.500 küçükbaş hayvan ilaçlama-yıkama olacak ve performansı akredite bir kurumdan alınacak test raporu ile tevsik edilecektir.

- d. The main parts of the machine shall be constructed of St37 steel and hot dip galvanised. Auxiliary parts shall be made of either the same material as the main parts or ASTM 304 stainless steel.
- d. Makine ana aksamı, St37 kalite çelikten üretilecek ve sıcak daldırma galvaniz işleminden geçirilecektir. İlave parçalar ise ana aksam malzemesi veya ASTM 304 kalite paslanmaz kromdan imal edilmiş olacaktır.
- e. The motor integrated in the system shall have min. 6.5 HP of power, 3,600 rpm, 2.6 kW and be a single-cylinder four-stroke motor.
- e. Sisteme entegre motorun gücü en az 6,5 beygir, 3.600 devir, 2,6 kW ve 4 zamanlı tek silindirli motor olacaktır.
- f. The machine shall have polyethylene water tank with a capacity of 1,000 litres and hoses to transmit the disinfecting fluid to the system. There shall be a filter at the outlet to prevent nozzle blockage.
- f. Makinenin hortumlarla bağlantılı şekilde dezenfekte suyunu sisteme iletecek 1.000 lt hacim kapasitesine sahip polietilen su deposu bulunacaktır. Depodan su çıkış noktasına, nozulların tıkanmaması için filtre süzgeç konulacaktır.
- g. The machine shall operate by spraying method through nozzles, by raising the fluid pressure to the required level. There shall also be a pump, motor unit, mechanical pressure regulator and manometer to set and measure the machine pressure.
- g. Makine kullanılan sıvının basıncını istenen basınç değerine yükselterek, nozullar üzerinden püskürtme metodu ile çalışacaktır. Makina basıncını ayarlamak ve ölçmek için ayrıca pompa, motor ünitesi, mekanik basınç regülatörü ve basınç göstergesi (manometre) olacaktır.
- h. The pump shall be capable of pumping water at min. 10 bars of pressure and min. 80 litre/minute of flow rate.
- h. Pompa basıncı, min 10 bar ve dakikada min 80 litre/dakika debide su basabilme kapasitesine sahip olacaktır.
- i. The machine shall have min. two electronic sensors of 12 V that sense the presence of an animal. Once the sensors sense the animals, the spraying shall start, and as the animal passes over and sensing stopped, the spraying shall stop.
- i. Makinede hayvanın varlığını algılayan 12V min. 2 adet elektronik sensör bulunacaktır. Sensörler hayvanı algıladığında püskürtme başlamalı, hayvan geçince algılamayı kestiğinde püskürtmeyi kesmelidir.
- j. There shall be min. 3 fast-reacting electronic valves to transmit the pressurised fluid to the nozzle lines upon signal from the sensor.
- j. Sensörden gelen sinyalle nozul hatlarına basınçlı sıvıyı iletmek için min. 3 adet hızlı tepkili elektronik valf bulunacaktır.
- k. There shall be nozzles on all four sides, namely at the bottom, top and sides of the machine. There shall be 6 angled and pointed nozzles at the bottom (to spray the underneath of sheep's tail), 14 perpendicular angled and pointed nozzles on the sides, and 9 angled and pointed nozzles at the top.
- k. Makinenin altında, yanlarında ve üstünde olmak üzere dört tarafta nozullar bulunacaktır. Altta açılı olarak (koyunların kuyruk altını ilaçlayacak) 6 adet noktasal tip, yanlarda dik olarak 14 adet açılı tip, üstte açılı olarak 9 adet noktasal tip nozul bulunacaktır.
- I. Bottom, top and side nozzle lines shall be capable of activating or deactivating both electronically and manually by valves to work separately or collectively. There shall be a button on the electronic switchboard to operate the system manually.
- I. Alt, üst ve yan nozul hatları ayrı ayrı veya birlikte çalışabilecek şekilde hem elektronik hem de vana ile manuel olarak aktif veya deaktif edilebilmelidir. Elektronik pano üzerinde sistemi manuel olarak çalıştırma butonu bulunacaktır.
- m. It shall be possible to set timer on the electronic switchboard to control fluid flow in the machine.
- m. Makinenin sıvı akış kontrolünü sağlamak için elektronik panosu üzerinden zaman ayarı yapılabilmelidir.
- n. The electronic switchboard shall be enclosed in an IP67 case not affected by water.
- n. Elektronik kontrol panosu sudan etkilenmeyecek şekilde kapalı bir sistem (IP 67) içinde olacaktır.

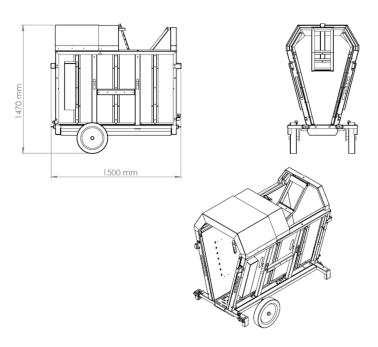
- o. The power source for electronic valves shall be batteries, installed in the switchboard so as not to be affected from water. The system shall have a charger to charge batteries when the motor is running. There shall be a battery charge status display on the electronic switchboard.
- o. Elektronik valflerin güç kaynağı olarak akü kullanılacak ve akü sudan etkilenmeyecek şekilde panonun içinde yer alacaktır. Sistem, motor çalışırken aküyü şarj edilebilir şekilde şarj dinamosuna sahip olmalıdır. Elektronik pano üzerinde akü şarj durumu göstergesi olacaktır.
- p. The machine shall have a fluid collector at the bottom section and such collected fluid shall be removed from the machine. It shall have a system returning the remaining chemicals to the disinfecting fluid tank. The discharge shall be led to a polyethylene tank of 1,000 litres of capacity to be supplied by the Contractor, and located at a distance (max. 50 m) as designated by the Engineer.
- p. Makinenin alt kısmında akan sıvıyı toplayan haznesi bulunacak ve toplanan sıvı makineden uzaklaştırılacaktır. Artan kimyasalı ilaçlı su tankına geri döndüren sistemine sahip bir özelliği olacaktır. Deşarj kontrol mühendisinin belirleyeceği mesafede (azami 50 metre) bulunan ve yüklenici tarafından tedarik edilecek ilave 1.000 litrelik polietilen tanka yapılacaktır.
- q. On the inlet and outlet of the machine, there shall be ramps inclined, mountable/dismountable, with inlet/outlet angles adjustable, sides closed that will allow animals to go easily into the device.
- q. Makinenin giriş ve çıkışında hayvanların kolayca cihaza girmelerini sağlayacak yan tarafları kapalı olan giriş-çıkış açısı ayarlanabilir, sökülüp-takılabilir eğimli rampalar bulunacaktır.
- r. The floor of the machine and ramps shall be rubber on sheet metal, except for main parts.
- r. Makinenin ve rampaların tabanı, ana aksam parçaları hariç sac üstü kauçuk olacaktır.
- s. There shall be a sliding shutter system on the outlet side of the upper case of the machine to prevent nozzles from spraying upward.
- s. Makinenin üst muhafaza kısmının çıkış tarafında, nozulların yukarı püskürtmesini engelleyici kayar şekilde açılır kapanır muhafaza sistemi bulunacaktır.
- t. There shall be a spray-gun system with extendable spiral hose to clean the machine.
- t. Makineyi temizlemek için uzayabilir spiral hortumlu ve tabancalı püskürtme sistemi bulunacaktır.
- u. The manufacturer shall provide 1 day of training to users.
- u. Üretici firma tarafından kullanıcılara 1 günlük eğitim verilecektir.
- v. The manufacturer shall have ISO 9001-2015 Quality Management certification.
- v. Üretici firma ISO 9001-2015 Kalite Yönetim Belgesine sahip olmalıdır.
- w. The machine shall have a warranty of 2 (two) years. The company, if needed, shall be capable of supply all parts for min. 3 (years) after the expiry of warranty.
- w. Makinenin 2 (iki) yıl garantisi olacaktır. Firma, ihtiyaç halinde garanti bitiminden sonra en az 3 (üç) yıl süreyle tüm parçaların tedarikini sağlayabilmelidir.
- x. When designing the system, care shall be taken for animal well-being in compliance with Law No. 5996 on Veterinary Services, Plant Health, Food and Fodder, preventing the machine from inflicting physical damage to animals, or causing fear or stress.
- x. Sistem tasarlanırken 5996 sayılı Veteriner Hizmetleri, Bitki Sağlığı, Gıda ve Yem Kanunu" hükümleri çerçevesinde hayvan refahı gözetilecek ve sistemin hayvanlara fiziksel zarar vermemesi, korku ve stres yaratmaması sağlanacaktır

Conceptual Drawing-1 // Konsept çizim -1

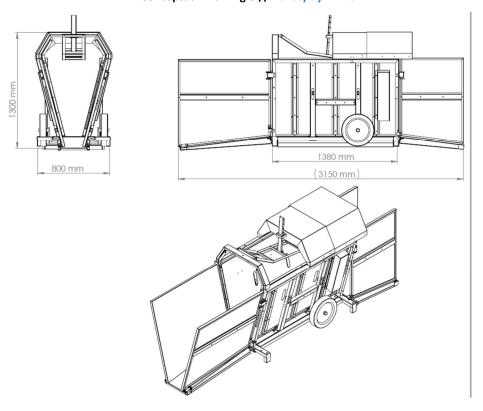


Translation of words on the drawing		
Turkish English		
Çıkış rampası	Outlet ramp	
Giriş rampası	Inlet ramp	
Çıkış	Outlet	
Giriş	Inlet	

Conceptual Drawing-2 // Konsept çizim -2



Conceptual Drawing-3 // Konsept çizim -3



F. Switchboard and Electrical Installation // Pano ve Elektrik Tesisatı:

- a. Two power outlets (earthed) of 220 V shall be installed on the steel columns of the shearing chute.
- a. 2 adet 220 V priz (topraklı) Kırkım Alanı çelik kolonlara monte edilecektir.
- b. There shall be separate cables (lines) and fuses for every component and power outlets that operate as connected to the GES (Solar Irrigation System) system.
- b. GES sistemine bağlı çalışacak her bir bileşenin ve prizlerin kabloları (linye) ile sigortları ayrı olacaktır.
- c. There shall be fuses for leak current.
- c. Kaçak akım için sigorta konulacaktır.
- d. Where necessary, the Contractor shall include in the switchboard [work item] such materials as power busses, power contactors, capacitors, capacitor contactors, measuring instrument rigs, voltmeters, amperemeters, power relays, control relays, command and control buttons for powered equipment, signal lights, screen etc.
- d. Gereki durumlarda, sistemin verimli ve güvenli çalışmasını sağlayacak elektrik baraları, güç kontaktörleri, kondansatörler, kondansatör kontaktörler, ölçü aletleri regler, voltmetre, ampermetre, güç rölesi, kontrol rölesi, elektrikle çalışan araçların kontrol ve komuta düğmeleri, sinyal lambası, ekran vb. qibi malzemeler Yüklenici tarafından panoya dahil edilecektir.
- e. All shearing chutes shall be earthed to standards.
- e. Standartlara uygun olarak, tüm kırkım alanının topraklaması yapılacaktır.
- f. The lightning protection system shall be constructed.
- f. Yıldırımdan korunma tertibatı yapılacaktır.
- g. The switchboard shall be constructed, in appropriate dimensions and standards, of 1.200 mm sheet metal, of IP65 materials, to accommodate batteries, inverters, charge control device and entire system in bracket shelves, and painted with electrostatic power paint to RAL 9006.
- g. Elektrik panosu; destek kollu raflarla, aküleri, invertörü, şarj kontrol cihazını ve tüm sistemi barındıracak şekilde IP 65 malzemeden, uygun ölçülerde ve standartlarda, 1.20 mm sactan ve imal edilecek ve elektrostatik toz boya ile RAL 9006 renginde boyanacaktır.
- h. A ventilation from corner shall be constructed to circulate external air through the switchboard to remove inside heat and gases.
- h. Pano içerisinde oluşan sıcaklık ve gazların dış hava ile sirkülasyonunu sağlamak amacıyla 4 köşeden havalandırma bölümü yapılacaktır.
- i. While the switchboard cover is to be two-piece, the backs of covers shall be sealed by sealant cords.
- i. Pano kapağı iki bölmeli olmakla beraber sızdırmazlığın sağlanılabilmesi için kapak arkaları fitiller vasıtasıyla sızdırmazlık sağlanacaktır.

III. SPECIFICATIONS FOR ITEMS/POSE DEFINITIONS // BİRİM FİYAT/POZ TARİFLERİ ŞARTNAMESİ

The works described in this section include all the necessary materials and losses, loading, horizontal and vertical transportation, unloading, workmanship, **transportation of material to the site**, contractor's profit and general expenses for the successful completion of the specified items.

Bu bölümde tanımlanan işler için her bir pozda tanımlanan işin tamamlanması için gereken tüm malzeme ve kayıplar, yükleme, düşey ve dikey nakliye, boşaltma, işçilik, malzemelerin sahaya nakliyesi, yüklenici karı ve genel giderler dahildir.

Whenever item/pose is related to an item/pose number from the official books¹ published by Turkish public institutes, the definition in this specification shall prevail for any inconsistency. In case of vagueness/absence of an issue in the item definition in this specification, the official definition shall prevail for only the vagueness/absence.

Bir poz, Türk kamu kurumları tarafından resmi olarak yayınlanan birim fiyat tarifleri kitabında² bulunan bir pozla ilişkilendirilmişse; resmi tanımla olan uyumsuzluklarda bu şartnamedeki tanım geçerlidir. Bu şartnamedeki tanımlarda belirsiz veya eksik bir husus olması durumunda, eksik ve belirsiz olan husus için resmi tanım geçerlidir.

The units of measurement used in the items/pose definitions are those of the International System of Units (SI). No other units may be used for measurements, pricing, detail drawings etc. (Any units not mentioned in the technical documentation must also be expressed in terms of the SI.) Abbreviations used are to be interpreted as follows:

Poz tariflerinde kullanılan ölçüm birimleri Uluslararası Birimler Sistemi (SI) birimleridir. Ölçüm, fiyatlandırma, ve uygulama çizimleri vb'de başka birimler kullanılmamalıdır. (Teknik dokümanlarda geçmeyen bütün birimler SI sistemine göre kullanılmalıdır.) Kullanılan kısaltmalar aşağıdaki gibidir.

Mmmillimetre // milimetre

M metre // metre

Da decare // dekar

mm² square millimetre // milimetre kare

m³ square metre // metre kare

m³ cubic metre // metre küp

Kg kilogram // kilogram

ton tonne (1000 kg) // ton (1000 kg)

pcs pieces // adet

hhour // saat

L.s. Lump sum // Götürü

km kilometre // kilometre

Ilitre // litre

kVAR kilovolt ampere reactive // reaktif güç

% per cent // yüzde

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¹ Official books valid for those specifications are published by;

[•] Republic of Turkey Ministry of Environment and Urbanization

[•] Republic of Turkey General Directorate of Highways

[•] Iller Bank, Turkey

Republic of Turkey General Directorate of State Hydraulic Works

² Bu şartname için aşağıdaki kurumlar tarafından yayınlanan resmi birim fiyat tarifleri geçerlidir:

[•] T.C. Çevre ve Şehircilik Bakanlığı

[•] T.C. Karayolları Genel Müdürlüğü

[•] Türkiye Elektrik Dağıtım A.Ş.

[•] Milli Savunma Bakanlığı

[•] İller Bankası, Türkiye

[•] T.C. Devlet Su İşleri

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-CIV-01	Excavation works by machine without using explosives (Deep and free excavation)	m³
	// Makine ile patlayıcı madde kullanmadan yapılan kazı işleri (Derin ve Serbest kazı)	
Description/	Making excavation of all type of soils by machine without using explosives for reinforce	ced concrete
Specifications	industrial construction at every depth and width, and removing the excavated mate	rial from the
Tanım/	pit; refilling the remaining spaces after the construction or installation, and moving the remaining	
Şartname	material up to 200 m or loading onto vehicles; unloading at store, fill site or berm site // Makine ile	
	patlayıcı madde kullanmadan her derinlik ve her genişlikte ve her cins zeminde betonarme sınai	
	imalat kazısı yapılması ve kazı çukuru dışına atılması, gerekli imalat veya inşaat yapıldıktan sonra	
	kazı yerinde kalan boşlukların doldurulması ve artan kısmın tümünün 200 metreye kadar atılması	
	veya taşıtlara yükletilmesi, depo, imla veya sedde yerinde boşaltılması	
Related official	15.120.1101, 15.120.1102, 15.120.1102, 15.120.1105, 15.120.1106, 15.120.1107, 15.120.1109	
pose/item	15.120.1003, 15.120.1005, 15.120.1007, 15.120.1009	
number, book	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircilik Bakanlığı	
İlgili resmi poz		
numarası, kitap		

Item no:	Item	Unit	
Poz no:	Poz	Birim	
HRSM-CIV-02	Supply, and machine laying, watering and compacting of gravel // Çakıl temin	m³	
	edilerek, makine ile serme, sulama ve sıkıştırma yapılması		
Description/	Price per m³ including any labor, material and loss, loading, horizontal and vertical car	riage and	
Specifications	unloading at the		
Tanım/	work site, and contractor's overheads and profit, for supply of the gravel, pouring on site, laying		
Şartname	with motor grader,		
	watering, and compacting in layers with a vibratory roller:		
	UNIT: Volume is calculated according to the units of measure in the design.// Çakılın ter	min edilmesi,	
	alana dökülmesi, motor greyderle serilmesi, sulanması, titreşimli silindir ile tabaka tabı	aka	
	sıkıştırılması için her türlü işçilik, malzeme ve zayiatı, iş yerinde yükleme, yatay ve düşe	y taşıma,	
	boşaltma, yüklenici		
	genel giderleri ve kârı dâhil, 1 m³ fiyatı:		
	ÖLÇÜ : Projesindeki ölçülere göre hacmi hesaplanır.		
Related official	15.125.1004 Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre	e ve Şehircilik	
pose/item	Bakanlığı		
number, book			
İlgili resmi poz			
numarası, kitap			

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-CIV-03	Pouring the regular ready-mix concrete of C16/20 compressive strength class, grey	m³
	color, produced at cement plant or purchased and pumped by the cement pump	
	(including transport of concrete) // Beton santralinde üretilen veya satın alınan ve	
	beton pompasıyla basılan, C 16/20 basınç dayanım sınıfında, gri renkte, normal	

hazır beton dökülmesi (beton nakli dahil)

Description/ Specifications Tanım/ Şartname

Delivery and placement of ready mix concrete procured from concrete batch plant (Batch plant shall meet the following requirements; minimum one loader, sufficient number of transmixers and concrete pumps, backup generator, weight type admixture feeders, 60 m3/h plant capacity, with air compressor, 4 aggregate bunkers, moisture sensors, conveyor belt-fed, fully automated from computer control cabinet, having a cement silo with minimum 50 tons of capacity, recycling system integrated. Batch plant shall have a laboratory capable of performing aggregate and concrete tests. All instruments of the batch plant shall be regularly calibrated and documented) composed of water, granulometric washed aggregate with artifical or natural sand designed as per the project requirements meeting the compressive strength of C 16/20 including cementitious materials and admixtures. Procurement, transmixer loading & unloading, vertical and horizontal transportation, placement, consolidation, curing, protection from cold and hot weather, providing mixing and curing / cleaning water are included. Quality control procedures of the concrete such as specimen preperation, testing and laboratory services are included. All equipment costs, batch plant expenses, laboratory expenses, advance payments, indirect costs, contrator costs and contractor profit are included.

Means of Measurement: As per the dimensions defined in the project, 1 m3 of C 16/20 regular gray concrete.

Remarks:

- 1) Prequalification of the batch plant meeting the requirements of TSE and governing standards, either manufactured at or procured from, shall be submitted to the administation prior to the batch plant operations for approval. Batch plant can only be used after the approval of the prequalification documentation proving that the batch plant meets the requirements of TSE.
- 2) Invoices including the compant information and project name have to be submitted as an attachment to the payment applications if the concrete is procured from a readymix plant.
- 3) Admixtures used during the concrete production will be paid seperately.
- 4) If a concrete pump is not used, the cost of the concrete pump shall be deducted from the analysis.
- // Beton üretimine uygun komple beton tesisinde (asqari 60m3/sa kapasiteli, dört gözlü agrega bunkerli kompresörlü ve kumanda kabini ile birlikte bilgisayar kontrollü, min. 50 ton kapasiteli çimento silosu bulunan konveyör bant sistemli, geri kazanım ünitesi, agrega ve beton deneylerini yapabilecek kapasitede laboratuar, jeneratör, yeteri kadar transmikser ve mobil beton pompası ile en az bir adet yükleyici, katkı tankı ve katkı tartı bunkeri, nem ölçer ve benzeri her türlü ekip ve ekipmana sahip periyodik kalibrasyonu yapılmış beton üretim tesisi) standardına ve projesine uygun, yıkanmış, elenmiş granülometrik kum-çakıl ve/veya kırmataş, çimento, su ve gerektiğinde katkı malzemesi ile C 16/20 sınıfında üretilen veya bu niteliklere sahip beton tesisinden satın alınan hazır beton harcının; beton kalite kontrollerinin yapılması, transmikserlere yüklenmesi, işyerine kadar nakli, döküm yerine beton pompası ile basılması, yerleştirilmesi, vibratör ile sıkıştırılması, sulanması, soğuktan, sıcaktan ve diğer dış tesirlerden korunması ve bakımının yapılması, gerekli ve yeter sayıda deney için numune alınması ve gerekli deneylerin yapılması, için gerekli her türlü işçilik, malzeme ve zayiatı, makine araç, gereç ve laboratuar giderleri, işyerindeki her türlü yatay ve düşey taşımalar, yükleme ve boşaltmalar, beton bünyesine giren granülometrik kum çakıl veya kırmataşın ve çimentonun temin edildiği, üretildiği veya satın alındığı yerden taşıtlara yüklenmesi, beton tesisine nakli, taşıtlardan boşaltılması, istifi, beton tesisine konulması, beton bünyesinde ve sulama için kullanılan suyun temini ve nakli, beton tesisi ve diğer tüm ekipmanların temini ve amortisman giderleri ile her türlü diğer giderler ve müteahhit genel giderleri ve kârı dâhil, yerinde dökülmüş ve basınç dayanımı C 16/20 olan gri renkte, normal hazır betonun 1 m³fiyatı: ÖLÇÜ: Projedeki boyutlar üzerinden hesaplanır.

NOT:

	1) Üretilen veya satın alınan betonun üretildiği tesisin, TSE ve mevzuatının gerektirdiği diğer belgelere sahip olması ve bu belgeleri imalata başlamadan önce idareye vermesi zorunludur. İbraz edilen belgelerin uygun olduğunun tespit ve kullanılmasına müsaade edilmesi kaydıyla ancak, bu tesiste üretilen veya satın alınan ve yürürlükteki mevzuatına göre piyasa arz koşullarını da taşıyan uygunluk belgeli betonun imalatta kullanılması mümkün olacaktır. 2) Betonun satın alınarak temin edilmesi halinde, üzerinde işin adı da belirtilmiş olan faturaların birer suretinin ödeme belgelerine eklenmesi zorunludur. 3) Beton bünyesine ilave olarak konulacak katkı malzemesinin bedeli ayrıca ödenecektir.
Related official	4) Pompa kullanılmaması halinde analizden pompa bedeli düşülür. 15.150.1003
pose/item	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircilik Bakanlığı
number, book	
İlgili resmi poz	
numarası, kitap	

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-CIV-04	Pouring of gray, regular, ready-mix concrete of compressive strength class C25/30,	m³
	manufactured in a concrete plant or purchased, and pumped by a	
	concrete pump (including transportation of concrete) // Beton santralinde üretilen	
	veya satın alınan ve beton pompasıyla basılan, C25/30 basınç dayanım sınıfında,	
	gri renkte, normal hazır beton dökülmesi (beton nakli dahil)	
Description/	Price per m³ of gray, regular, cast-in-situ, ready-mix concrete with C 25/30 compress	ive strength,
Specifications	including any labor, materials and losses, machinery, equipment, instrument and labo	ratory costs,
Tanım/	any horizontal and vertical carriage, loading and unloading at the work site for perform	ning concrete
Şartname	quality controls, loading on truck mixers, transportation to the work site, pumping	on the cast
	location by a concrete pump, compacting with vibrator, watering, protecting from	om extreme
	temperatures and other external effects, maintaining, and taking a sufficient amount o	•
	tests and conducting the required tests on, the ready-mix concrete grout in complia	
	relevant standard and project design, washed, sieved, and manufactured in C 25/3	
	granulometric sand-gravel and/or crushed stone, cement, water and additives where	-
	a complete concrete plant with appropriate specifications for concrete manufacture (ed	
	min. 60 m ³ /h capacity, four-cell aggregate bunker, compressor, control cabin for c	•
	control, a cement silo with min. 50-ton capacity, a recovery unit, a laboratory w	
	capacity to conduct aggregate and concrete tests, a power generator, a sufficient amount of truck	
	mixers and mobile concrete pumps, min. one loader, additive tank and additive weigh hopper,	
	moisture meter and similar other equipment, and calibrated) or purchased from a concrete plant	
	that fulfills the said specifications, loading onto vehicles at the place of supply, p	
	purchase, transfer to the concrete plant, unloading from vehicles, stowing and placement at the	
	concrete plant of any granulometric sand, gravel or crushed stone and cement to be	
	concrete, supply and transportation of the water to be added to the concrete and used	_
	supply, and depreciation expenses, of the concrete plant and all other equipment, incl	luding other
	expenses, contractor's overheads and profit:	
	UNIT:	
	Calculated according to dimensions in the project. NOTE:	
	1) It is compulsory for the plant where the concrete that is manufactured or purchase	d from to be
	awarded TSE and any other certificates that may be required by the legislation and to	present such
	certificates to the administration before commencement of production. The concre	ete with the
	certificate of compliance, which fulfills the condition of supply to the market in complia	nce with the
	relevant legislation, may be used in production only if such certificates are found to be	appropriate
	and the concrete is allowed to be used.	

2) If the concrete is supplied by purchase, a copy of the invoices indicating the name of the work must be attached to the documents of payment. 3) Cost of the additives to be added to the concrete shall be paid separately. 4) Pump cost is deducted from the analysis, if pump is not used. // Beton üretimine uygun komple beton tesisinde (asgari 60m³/sa kapasiteli, dört gözlü agrega bunkerli kompresörlü ve kumanda kabini ile birlikte bilgisayar kontrollü, min. 50 ton kapasiteli çimento silosu bulunan konveyör bant sistemli, geri kazanım ünitesi, agrega ve beton deneylerini yapabilecek kapasitede laboratuar, jeneratör, yeteri kadar transmikser ve mobil beton pompası ile en az bir adet yükleyici, katkı tankı ve katkı tartı bunkeri, nem ölçer ve benzeri her türlü ekip ve ekipmana sahip periyodik kalibrasyonu yapılmış beton üretim tesisi) standardına ve projesine uygun, yıkanmış, elenmiş granülometrik kum-çakıl ve/veya kırmataş, çimento, su ve gerektiğinde katkı malzemesi ile C 25/30 sınıfında üretilen veya bu niteliklere sahip beton tesisinden satın alınan hazır beton harcinin; beton kalite kontrollerinin yapılması, transmikserlere yüklenmesi, işyerine kadar nakli, döküm yerine beton pompası ile basılması, yerleştirilmesi, vibratör ile sıkıştırılması, sulanması, soğuktan, sıcaktan ve diğer dış tesirlerden korunması ve bakımının yapılması, gerekli ve yeter sayıda deney için numune alınması ve gerekli deneylerin yapılması, için gerekli her türlü işçilik, malzeme ve zayiatı, makine araç, gereç ve laboratuar giderleri, işyerindeki her türlü yatay ve düşey taşımalar, yükleme ve boşaltmalar, beton bünyesine giren granülometrik kum çakıl veya kırmataşın ve çimentonun temin edildiği, üretildiği veya satın alındığı yerden taşıtlara yüklenmesi, beton tesisine naklı, taşıtlardan boşaltılması, istifi, beton tesisine konulması, beton bünyesinde ve sulama için kullanılan suyun temini ve nakli, beton tesisi ve diğer tüm ekipmanların temini ve amortisman giderleri ile her türlü diğer qiderler ve yüklenici qenel qiderleri ve kârı dâhil, yerinde dökülmüş ve basınç dayanımı C 25/30 olan gri renkte, normal hazır betonun 1 m³fiyatı: ÖLÇÜ: Projedeki boyutlar üzerinden hesaplanır. NOT: 1) Üretilen veya satın alınan betonun üretildiği tesisin, TSE ve mevzuatının gerektirdiği diğer belgelere sahip olması ve bu belgeleri imalata başlamadan önce idareye vermesi zorunludur. İbraz edilen belgelerin uygun olduğunun tespit ve kullanılmasına müsaade edilmesi kaydıyla ancak, bu tesiste üretilen veya satın alınan ve yürürlükteki mevzuatına göre piyasa arz koşullarını da taşıyan uygunluk belgeli betonun imalatta kullanılması mümkün olacaktır. 2) Betonun satın alınarak temin edilmesi halinde, üzerinde işin adı da belirtilmiş olan faturaların birer suretinin ödeme belgelerine eklenmesi zorunludur. 3) Beton bünyesine ilave olarak konulacak katkı malzemesinin bedeli ayrıca ödenecektir. 4) Pompa kullanılmaması halinde analizden pompa bedeli düşülür. Related official 15.150.1005 pose/item Republic of Turkey Ministry of Environment and Urbanization // T.C. Cevre ve Şehircilik Bakanlığı

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-CIV-05	Cutting, bending and placement of Ø 8- Ø 28 mm deformed concrete steel bars //	Ton
	Ø 8- Ø 28 mm nervürlü beton çelik çubuğu, çubukların kesilmesi, bükülmesi ve yerine	
	konulması	

number, book İlgili resmi poz numarası, kitap

Description/ Specifications Tanım/

Şartname

Technical Description: 1-ton unit price of deformed concrete steel bar including the cutting, bending and placement of such bars according to the application project, iron bonding wire and any material required for binding the bars and outages, loading, vertical and horizontal transport and unloading at workplace, labor, contractor profit and overhead costs.

MEASUREMENT:

- 1) The length of the iron including crotchets shall be measured according to the concrete application drawings.
- 2) The weights of the steel bars shall be taken from the chart below.
- 3) Steel bars and joints which are not shown in the project shall not be taken into the calculation
- 4) The weights (m) in the chart are base for calculation. As bonding wires, steel parts used in the alignment of steel bars and outages are considered in the analysis, no additional payment shall be made

Diameter (Ø) Unit weight

mmKg/m

80,395

100,617

120,888

141,208

161,578

181,998

202,466

222,984

243,551

264,168

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284,834.

// Nervürlü beton çelik çubuğunun detay projesine göre kesilip bükülerek hazırlanması yerine konması, bağlanması için demir, bağlama teli ve gerekli her türlü malzeme ve zayiatı, inşaat yerindeki yükleme, yatay ve düşey taşıma, boşaltma, işçilik, müteahhit genel giderleri ve kârı dâhil, 1 ton fiyatı:

ÖLÇÜ:

- 1) Betonarme detay resimlerine göre kroşeler ile birlikte demirin boyu ölçülür.
- 2) Çelik çubukların ağırlıkları aşağıdaki cetvelden alınır.
- 3) Projede gösterilmeyen çelik çubuklar ve ekler hesaba katılmaz.
- 4) Cetveldeki (m) ağırlıkları hesaba esastır. Bağlama teli, çelik çubuk sıraları arasında kullanılacak çelikler ve zayiat analizde dikkate alındığından, ayrıca ödeme yapılmaz.

Çap (Ø)Birim Ağırlığı

mmKg/m

80,395

100,617

120,888

141,208

161,578

181,998

202,466

222,984

243,551

264,168

284,834

Related official pose/item number, book

15.160.1003, 15.160.1004

Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircilik Bakanlığı

İlgili resmi poz numarası, kitap

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-CIV-06	Manufacturing and installing various iron works of sheet metals, sheet bars and shape iron // Sac levhalar, lama ve profil demirlerden çeşitli demir işleri yapılması ve yerine konulması	kg
Description/	-	
Specifications		
Tanım/		
Şartname		
Related official	15.550.1201, 15.550.1202	
pose/item	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircili	k Bakanlığı
number, book		
İlgili resmi poz		
numarası, kitap		

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-CIV-07	Supply, installation and assembly of framing construction with any type of profiled	Ton
	steel, steel bars and sheets // Her çeşit profil, çelik çubuk ve çelik saclarla karkas	
	(çerçeve) inşaat yapılması, yerine tespiti	
Description/	Supply, installation and assembly of framing construction with any type of profiled ste	el, steel bars
Specifications	and sheets (framing construction, bridge beams using profiled steel, connections	and similar
Tanım/	construction)	
Şartname	Note: "Assembly of prefabricated exterior and ceiling scaffolding with full safety measu	ures" will not
	be paid, it is included to this price.//	
	Her çeşit profil, çelik çubuk ve çelik saçlarla karkas, (çerçeve) inşaat yapılması, yerine	tespiti (yapı
	karkası, köprülerde profil demirlerinden kirişler, başlıklar, bağlantılar ve benzeri imalat	lar)
	Not: Ön yapımlı bileşenlerden oluşan tam güvenlikli, dış cephe ve tavanlar için iş iskel	esi yapılması
	için ödeme yapılmayacaktır, bu fiyata dahildir.	
Related official	15.165.1003, 15.185.1011, 15.185.1012	
pose/item	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircilik Bakanlığı	
number, book		
İlgili resmi poz		
numarası, kitap		

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-CIV-08	Production of reinforced concrete plain surface form works with plywood //	m²
	Plywood ile düz yüzeyli betonarme kalıbı yapılması	
Description/	Technical Description: 1 m2 unit price of production reinforced concrete plain surface form works	
Specifications	made of 21 mm thickness plywood (filmed) artificial wood and inner surface lubricate	ed according
Tanım/	to the project and specification, including their disassembly, strengthening against t	the vibration
Şartname	required, material and their outages, vertical and horizontal transport at workpla	ace, loading-
	unloading, labor, contractor profit and overhead costs.	

	MEASUREMENT: The surfaces facing the form works shall be calculated from their project or by	
	measuring at site. The surrounding form works of production holes which their gap volume has not	
	been reduced shall be not taken into the measurement. No hole gap shall be extracted from the	
	hole side at the form side.	
	NOTE 1) The form works scaffolding shall not be paid, included to this price.	
	2) The material extracted from the forms shall be the contractor's property.	
	<i>//</i>	
	Proje ve şartnamesine göre; iç yüzeyi yağlanmış 21 mm kalınlığında plywood (film kaplı) suni	
	tahtalardan düz yüzeyli beton ve betonarme kalıbı yapılması, gerekli görülen vibrasyona dayanacak	
	şekilde takviye edilmesi, kalıbın sökülmesi, bu işler için gerekli gerekli her türlü malzeme ve zayiatı	
	ile işçilik, iş yerinde yatay-düşey taşıma, yükleme-boşaltma, müteahhit genel giderleri ve kârı dâhil,	
	1 m² fiyatı:	
	ÖLÇÜ:	
	Kalıp gören yüzler projesinden veya yerinde ölçülerek hesaplanır. Boşluk hacmi çıkarılmayan imalât	
	deliklerinin çevre kalıpları ölçüye dâhil edilmez. Deliğin kalıp tarafındaki yüzünden delik boşluğu	
	çıkarılmaz.	
	NOT:	
	1) Kalıp iskelesi için ayrıca ödeme yapılmayacaktır, bu fiyata dahildir.	
	2) Kalıptan çıkan malzeme müteahhide aittir.	
Related official	15.180.1003, 15.185.1001	
pose/item	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircilik Bakanlığı	
number, book		
İlgili resmi poz		
numarası, kitap		

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-CIV-09	Water insulation of two layers with polymer bituminous covers with plastomer-	m²
	based fiberglass carrier of 3 mm in thickness (flexural strength of-5 degrees) and	
	plastomer-based polyester felt carrier of 3 mm in thickness (flexural strength of-5	
	degrees) // 3 mm kalınlıkta plastomer esaslı (-5 °C soğukta bükülmeli) cam tülü	
	taşıyıcılı ve 3 mm kalınlıkta plastomer esaslı (-5 °C soğukta bükülmeli) polyester keçe	
	taşıyıcılı polimer bitümlü örtüler ile iki kat su yalıtımı yapılması	
Description/	Water insulation of two layers with polymer bituminous covers with plastomer-based fiberglass	
Specifications	carrier of 3 mm in thickness (flexural strength of-5 degrees) and plastomer-based polyester felt	
Tanım/	carrier of 3 mm in thickness (flexural strength of-5 degrees) // 3 mm kalınlıkta plastor	mer esaslı (-5
Şartname	°C soğukta bükülmeli) cam tülü taşıyıcılı ve 3 mm kalınlıkta plastomer esaslı (-5 °C soğuk	ta bükülmeli)
	polyester keçe taşıyıcılı polimer bitümlü örtüler ile iki kat su yalıtımı yapılması	
Related official	15.255.1001	
pose/item	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircili	k Bakanlığı
number, book		
İlgili resmi poz		
numarası, kitap		

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-CIV-10	Roofing with 0.50-mm thickness hot-dip galvanized grooved/trapezoidal sheet	m²
	metal on steel or precast reinforced concrete beams. // Çelik veya ön yapımlı	
	betonarme kiriş üzerine 0.50 mm kalınlıkta sıcak daldırma galvanizli oluklu/trapez	
	sac ile çatı örtüsü yapılması.	

Description/ Price per m² including loading, horizontal and vertical carriage and unloading at the construction **Specifications** site, any material and losses, labor, equipment and instrument costs, contractor's overheads and Tanım/ profit for roofing with 0.50-mm-thick hot-dip galvanized, grooved metal sheets on steel or precast **Sartname** reinforced concrete beams, including installing on the existing steel or precast reinforced concrete beams 0.50-mm-thick hot-dip galvanized, grooved/trapezoidal metal sheets starting from the opposite of the dominant direction of wind with min. 10 cm transversal and 15 cm longitudinal overlaps as per the relevant specifications, drilling the grooved metal sheets with a drill, fixing the metal sheets to the steel or precast reinforced concrete beam with capped lag screws using metal washers and rubber seals by shaping them in conformance with the beam, insulating the chimney base and other plaster bases so as to ensure watertightness, making ridges using ridge components: UNIT: To be calculated by the amount of inclined surfaces, gaps larger than 0.25 m² are deducted, the fascia of eaves are included, if any. NOTE: If the current gaps of securing purlins for steel plates and precast reinforced concrete grooved slabs are not appropriate for securing them, purlins shall be made once more per their // Mevcut çelik veya ön yapımlı betonarme kiriş üzerine 0,50 mm kalınlıkta sıcak daldırma galvanizli oluklu/trapez sac levhaların döşeme işlemine hâkim rüzgâr yönüne ters yönden başlamak ve birbiri üzerine şartnamesine uygun olarak en az enden 10 cm ve boydan 15 cm bindirilerek, oluklu levhalar matkapla delindikten sonra, madeni pul ve lastik conta kullanılarak kepli kancalı vidalarla , çelik veya ön yapımlı betonarme kirişe uygun şekil verilerek, bu kirişlere monte edilmesi, baca dibi ve diğer sıva diplerinin su sızdırmayacak şekilde yalıtılması, mahya elemanları ile mahyaların teşkili, inşaat yerindeki yükleme, yatay ve düşey taşıma, boşaltma, her türlü malzeme ve zayiatı, araç ve gereç giderleri, yüklenici genel giderleri ve kârı dâhil, çelik veya ön yapımlı betonarme kiriş üzerine 0,50 mm kalınlıkta sıcak daldırma galvanizli oluklu sac levhalar ile çatı örtüsü yapılmasının 1 m² ÖLÇÜ : Meyilli satıhlar üzerinden hesaplanır. 0.25 m²den büyük boşluklar düşülür, varsa saçak alınları ölçüye dâhil edilir. NOT : Mevcut çelik ve ön yapımlı betonarme oluklu levha tespit aşıklarının aralıkları levha tespiti için uygun değilse, aşıklar kendi pozundaki bedel karşılığında uygun aralıkta yeniden yaptırılır. Related official 15.325.1109 pose/item Republic of Turkey Ministry of Environment and Urbanization // T.C. Cevre ve Sehircilik Bakanlığı number, book İlgili resmi poz numarası, kitap

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-CIV-11	Flooring with cobble stone of steam cured regular cement at 8 cm of height (at all	m²
	sizes, colours and patterns) // 8 cm yüksekliğinde normal çimentolu buhar kürlü	
	beton parke taşı ile döşeme kaplaması yapılması (her ebat, renk ve desende)	
Description/	Flooring with cobble stone of steam cured regular cement at 8 cm of height (at all sizes, colours and	
Specifications	patterns) // 8 cm yüksekliğinde normal çimentolu buhar kürlü beton parke taşı ile döşeme kaplaması	
Tanım/	yapılması (her ebat, renk ve desende)	
Şartname		
Related official	15.435.1005	
pose/item	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircilik Bakanlığı	
number, book		

İlgili resmi poz numarası, kitap

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-CIV-12	Paving border stones of $50x20x10$ cm in size, of steam cured regular cement (finished surface, all colours) $\frac{1}{50} \times \frac{20}{20} \times \frac{10}{50} \times 10$	m
	buhar kürlü beton bordür döşenmesi (pahlı, her renk)	
Description/	Paving border stones of 50x20x10 cm in size, of steam cured regular cement (finished	d surface, all
Specifications	colors) // 50 x 20 x 10 cm boyutlarında normal çimentolu buhar kürlü beton bordür döşenmesi (pahlı,	
Tanım/	her renk)	
Şartname		
Related official	15.435.1203	
pose/item	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircili	k Bakanlığı
number, book		
İlgili resmi poz		
numarası, kitap		

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-CIV-13	Painting the iron surfaces with two layers of solvent-based epoxy paint // Demir yüzeylere iki kat solvent bazlı epoksi boya yapılması	m²
Description/	Painting the iron surfaces with two layers of solvent-based epoxy paint // Demir yüzeylere iki kat	
Specifications	solvent bazlı epoksi boya yapılması	
Tanım/		
Şartname		
Related official	15.540.1103	
pose/item	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircili	k Bakanlığı
number, book		
İlgili resmi poz		
numarası, kitap		

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-CIV-14	Small livestock portable ramp (fixed) in accordance with the specification //	pieces
	Şartnamesine uygun küçükbaş hayvan portatif rampası (maktu)	
Description/		
Specifications	Please refer "3. PORTABLE RAMP TECHNICAL SPECIFICATIONS // KÜÇÜKBAŞ HAYVAN PORTATİF	
Tanım/	RAMPA TEKNİK ŞARTNAMESİ (HRSM-CIV-14)"	
Şartname		
Related official	N/A	
pose/item		
number, book		
İlgili resmi poz		
numarası, kitap		

Item no:	Item	Unit
Poz no:	Poz	Birim

HRSM-CIV-15	Mobile watering troughs of galvanized sheet metal in accordance with the specification // Sartnamesine uygun galvanizli sacdan seyyar sıvat yapımı	pieces
Description/ Specifications Tanım/ Şartname	Please refer " 4. TECHNICAL SPECIFICATIONS FOR CONSTRUCTING WATERING TROUG GALVANISED SHEET METAL // GALNANİZLİ SACDAN SEYYAR SIVAT YAPIMI TEKNİK ŞA (HRSM-CIV-15)"	
Related official pose/item number, book ilgili resmi poz numarası, kitap	N/A	

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-MEC-01	Small livestock bathing machine in accordance with the specification//	pieces
	Şartnamesine uygun koyun ilaçlama makinesi	
Description/		
Specifications	Please refer " 5. TECHNICAL SPECIFICATIONS FOR SMALL LIVESTOCK BATHING N	MACHINE //
Tanım/	KÜÇÜKBAŞ HAYVAN YIKAMA MAKİNASI TEKNİK ŞARTNAMESİ (HRSM-MEC-01)"	
Şartname		
Related official	N/A	
pose/item		
number, book		
İlgili resmi poz		
numarası, kitap		

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-MEC-02	Small livestock weigh-scales // Küçükbaş hayvan baskülü	pieces
Description/	Capacity // Kapasite: Min. 600 kg	
Specifications	Precision // Hassasiyet: +/-100 gr	
Tanım/	Platform size // Platform Ölçüleri: min. 70 x 110 cm (+/-5 cm)	
Şartname	Cage height // Kafes Yüksekliği: 95 cm (+/-5 cm)	
	Number of gates // Kapı Adedi: 2 (front and rear at the short side) // 2 (Kısa kenarda	ön ve arka)
	Number of loadcell // Yük Hücre Sayısı: 4	
	Overload dumpers // Aşırı yük stoperleri: Yes // Var	
	Battery operating time for single charge//Tek şarjda akü kullanım süresi: min. 120 h	rs // min. 120
	sa.	
	Screen // Ekran: Backlight LED	
	Battery power saving mode // Akü tasarruf modu: Yes // Var	
	Tare setting by external pan // Harici kefe ile dara alma: Yes // Var	
	Paint // Boya: Non-scratchable, cured electrostatic powder coating // Elektrostatik	çizilmez fırın
	boya	
	Keypad // Tuş takımı: Water-proof (membrane material) // Sudan etkilenmeye	n (membrane
	malzeme)	
	Warranty term // Garanti süresi: min. 24 months // min. 24 ay	
Related official	N/A	

pose/item
number, book
İlgili resmi poz
numarası, kitap

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-MEC-03	Backpack sprayers // Sırt pulvarizatörü	pieces
Description/	Motor type // Motor Tipi: Single-cylinder, two-stroke, gasoline-fired // Tek silindin	r, 2 zamanlı,
Specifications	benzinli	
Tanım/	Max. power // Max. Güç: 1.2 HP – 0.9 kW	
Şartname	Cylinder volume // Silindir hacmi: min. 35 cc	
	Holding capacity // İlaçlama depo kapasitesi: min. 25 lt	
	Effective spray range // Etkili püskürtme mesafesi: min. 8 m, max. 10 m	
	Length of spraying rod // Püskürtme çubuğu uzunluğu: 120 cm	
Related official	N/A	
pose/item		
number, book		
İlgili resmi poz		
numarası, kitap		

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-ELC-01	Surface-mounted galvanized steel electric panels from 0.20 to 0.30 m ² (including	pieces
	0.30 m²) // 0,20 - 0,30m2'ye kadar (0,30 m2 dahil) sıva üstü galvaniz sac tablolar	
Description/	2Panel body and covers shall be manufactured from ready-made galvanized sheet wit	h a thickness
Specifications	of at least 1 mm for tables with an area of 0.5 m², and at least 1.5 mm thick for panels	with an area
Tanım/	of more than 0.5 mlts depth will be at least 200 mm and all connections will be made us	sing fasteners
Şartname	such as bolts, nuts and rivets. Necessary holes for cable entries will be drilled on the	he cover and
	bakelite or plastic glands will be mounted on the hole mouths to prevent deterio	ration of the
	conductor insulation. In addition, there will be labels for each device in the panel on the	e inner cover.
	For the phase lines inside the switchboard, there will be a required number of non-fla	mmable type
	terminals or busbars painted in grey, black and brown in accordance with TS EN 604	45, light blue
	painted neutral and green/yellow painted earthing busbars. The inside and outside of	the panel will
	be painted with electrostatic powder paint, the panel cover will be connected to the main body	
	with a flexible conductor and grounded. The supply of the panel, its transportation to the workplace	
	and its assembly, all kinds of materials, terminals, and workmanship, including the delivery will be	
	made in working condition. Size: The m² values specified in the lower poses represent the inner	
	cover area. If the equipment such as the cost of the grounding installation and the Fuse switch in	
	the panel and etc. are not given in unit prices, it is completed by the contractor. Note: The panels	
	will be produced in accordance with the 2014/35/EU Regulation on Electrical Equipment Designed	
	for Certain Voltage Limits, TS EN 61439-1/2 standards and will be presented to the ma	rket with the
	CE conformity mark. In addition, according to the TS EN 62262 standard, the degree	of protection
	against mechanical impacts will be at least IK 08. According to TS EN 61439-1/2 stan	idards, "Type
	tests" will be made and the test results will be given to the Management. //	
	Pano gövdesi ve kapakları, 0,5 m² kadar alana sahip tablolarda en az 1 mm kalınlığınd	
	üzerinde alana sahip panolarda ise en az 1,5 mm kalınlığında hazır galvanizli sacdan	imal edilmiş

delik ağızlarına iletken izolesinin bozulmaması için bakalit veya plastik rakor monte edilecek Ayrıca iç kapak üzerinde pano içerisindeki her cihaz için etiketler bulunacaktır. Pano içerisindeki hatları için gerekli sayıda TS EN 60445'e uygun olarak gri, siyah ve kahverengi renklerle boy yanmayan tipte klemens veya bara, açık mavi boyalı nötr ve yeşil/sarı boyalı topraklama baral bulunacaktır. Pano içi ve dışı elektrostatik toz boya ile boyanacak, pano kapağı bükülgen iletkel ana gövdeye bağlanıp topraklanacaktır. Panonun temini, iş yerine nakli ve montajı, her n malzeme, klemensler ve işçilik dâhil işler halde teslimi. Ölçü: Alt pozlarda belirtilen m² değerleri kapak alanını ifade etmektedir. Pano içerisindeki sigorta şalter vb. ile topraklama tesisatı bedeli gi donanımlar birim fiyatlarda verilmemişse yüklenici tarafından tamamlanır. Not: Pano 2014/35/AB Belirli Gerilim Sınırları İçin Tasarlanan Elektrikli Ekipman ile ilgili yönetmeliğine, TS 61439-1/2 standartlarına uygun olarak üretilmiş ve CE uygunluk işaretiyle piyasaya arz edilr olacak. Ayrıca TS EN 62262 standardına göre mekanik darbelere karşı koruma derecesi en az IK olacaktır. TS EN 61439-1/2 standartlarına göre "Tip testler" yaptırılarak, buna ait test sonuçli idareye verilecektir.	arı nle evi iç ibi lar EN niş
Related official 35.100.2103	
pose/item Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircilik Bakanlığ	!
number, book	
İlgili resmi poz numarası, kitap	

Item no:	Item	Unit	
Poz no:	Poz	Birim	
HRSM-ELC-02	Installation of supply lines using lead-free, PVC insulated NVV (NYM) type cables: 3	m	
	x 2.5 mm ² //		
	Kurşunsuz pvc izoleli kabloyla besleme hattı 3*2.5 mm2 NVV (NYM)		
Description/	Installation of supply lines using lead-free, PVC insulated NVV (NYM) cables in compliance with TS		
Specifications	EN 50525-1, TS 9756 HD 21.1 S4, TS 9758 HD 21.3 S3, TS 9760 HD 21.5 S3, TS IEC 227-6, TS D 21.13		
Tanım/	S1 (pipes not included.) Note: The item shall be manufactured in compliance with the TS EN 50575		
Şartname	and TS EN 50575/A1 standards, the Regulation (EU) No.305/2011 Construction Products - CPF		
	released with a CE marking, and the manufacturer shall have a declaration of performance an		
	Certificate of Constancy of Performance issued by an organization accredited by the European		
	Union. //		
	TS EN 50525-1, TS 9756 HD 21.1 S4, TS 9758 HD 21.3 S3, TS 9760 HD 21.5 S3, TS IEC 2	227-6, TS HD	
	21.13 S1'e uygun kurşunsuz PVC izoleli NVV (NYM) kablolar ile besleme hattı tesis edilmesi.(boru		
	dâhil değildir.) Not: TS EN 50575 ve TS EN 50575/A1 standartlarına, 305/2011/AB Yapı	Malzemeleri	
	Yönetmeliğine uygun olarak üretilmiş, CE uygunluk işaretiyle piyasaya arz edilmiş	ve üreticinin	
	performans beyanı ve Avrupa Birliği tarafından akredite edilmiş kuruluşlardan alınmış	<i>Performans</i>	
	Değişmezlik Sertifikasına sahip olacaktır.		
Related official	35.140.2508		
pose/item	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircili	k Bakanlığı	
number, book			
İlgili resmi poz			
numarası, kitap			

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-ELC-03	Installation of column and supply lines with 1-KV, underground YVV (NYY) cables: 1	m
	x 16 mm ² //	
	1kv y.altı kabloları ile kolon ve besleme hattıı 1*16 mm2 nyy (TS IEC 60502-1+A1)	

Description/ Specifications Tanım/ Şartname

Installation of column and supply lines with 1-KV, underground YVV (NYY) cables in compliance with TS IEC 60502-1+A1 standards. Supply to the workplace, including cable bushings and escape pipes, any other material and labor, of underground cables for installation on plaster, on walls and ceilings through consoles or clips, or through conduits inside the building, and through conduits outside the building. Unit: The length of the cable between terminal boxes and terminal caps shall be considered. Multiple cables installed in the same conduit shall be housed in cable ducts or pipes in the diameter and length required for each cable at the locations of passage. The terminal boxes, caps, junction boxes, consoles, and conduits shall be paid separately. Iron structures shall be paid per the Item No. Y.23.176. No additional charge shall apply for passage ducts and pipes up to 10 meters long. Note: The item shall be manufactured in compliance with the TS EN 50575 and TS EN 50575/A1 standards, the Regulation (EU) No.305/2011 Construction Products - CPR, released with a CE marking, and the manufacturer shall have a declaration of performance and Certificate of Constancy of Performance issued by an organization accredited by the European Union. //

TS IEC 60502-1+A1 standartlarına uygun YVV (NYY) tipi 1 kV yeraltı kabloları ile kolon ve besleme hattı tesis edilmesi. Bina içinden sıva üstünde, konsollar veya kroşeler üzerinden duvara, tavana veya kanallar içine, bina dışında kanallar içine döşenmek üzere yer altı kablosunun iş yerinde temini, geçit ve güvenlik boruları, her nevi malzeme kroşe ve işçilik dâhil. Ölçü: Kablonun kofre ve başlıklar arasındaki boyu ölçülür. Aynı kanal içine döşenen birden fazla kablo, geçiş yerlerinde her biri ayrı ayrı gerekli çap ve boyda büz veya boru içerisinde muhafaza altına alınacaktır. Kofre başlık, buat, konsol, kablo kanalı ve rögar bedeli ayrıca ödenir. Demir imalat BFT No 15.550.1202'den ödenir. Geçiş büz ve boruları için toplam 10 metreye kadar ayrıca ücret ödenmez. Not: TS EN 50575 ve TS EN 50575/A1 standartlarına, 305/2011/AB Yapı Malzemeleri Yönetmeliğine uygun olarak üretilmiş, CE uygunluk işaretiyle piyasaya arz edilmiş ve üreticinin performans beyanı ve Avrupa Birliği tarafından akredite edilmiş kuruluşlardan alınmış Performans Değişmezlik Sertifikasına sahip olacaktır.

Related official pose/item number, book

İlgili resmi poz numarası, kitap 35.140.3103

Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircilik Bakanlığı

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-ELC-04	Installation of column and supply lines with 1-KV, underground N2XH cables: 4 x 4 mm² //	m
Description/ Specifications Tanım/ Şartname	Supply to the workplace, including cable bushings and escape pipes, any other materi of 0.6/1kV, underground N2XH cables for installation on plaster, on walls and ceil consoles or clips, or through conduits inside the building, and through conduits outside Note: The item shall be manufactured in compliance with the TS EN 50575 and TS Estandards, the Regulation (EU) No.305/2011 Construction Products - CPR, release marking, and the manufacturer shall have a declaration of performance and Certificate of Performance issued by an organization accredited by the European Union. // TS HD 604 S1 standardina uygun, N2XH, 0,6/1kV kablolar ile bina içinden siva üstün veya kroşeler üzerinden duvara, tavana veya kanallar içine, bina dışında kanallar içir üzere yer altı kablosunun iş yerinde temini, geçit ve güvenlik boruları, her nevi malze işçilik dâhil. Not: TS EN 50575 ve TS EN 50575/A1 standartlarına, 305/2011/AB Yapı Yönetmeliğine uygun olarak üretilmiş, CE uygunluk işaretiyle piyasaya arz edilmiş performans beyanı ve Avrupa Birliği tarafından akredite edilmiş kuruluşlardan alınmış Değismezlik Sertifikasına sahip olacaktır.	ings through the building. EN 50575/A1 ad with a CE of Constancy de, konsollar ne döşenmek eme kroşe ve Malzemeleri ve üreticinin
Related official	35.150.2192	
pose/item	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircilik Bakanlığı	

number, book
İlgili resmi poz
numarası, kitap

Item no:	Item	Unit	
Poz no:	Poz Birim		
HRSM-ELC-05	LED projectors; min. 2500 lm light flux, max. 30 W consumption. // piece		
	Led projetör, ışık akısı en az 3500 lm, armatür ışıksal verimi en az 110 lm/w		
Description/	Supply to the work site, and delivery in working order, including any material a	nd labor, of	
Specifications	projectors with body and front glass frame made of injected cast aluminum, which shall be coated		
Tanım/	with ovendried paint, equipped a tempered front glass, resistant to 250°C temp	erature and	
Şartname	impacts, certified with minimum IP 65 and IK 09 degree of protection, operable at -20ºC to +85Cº,		
	provided with the components necessary for installation (on ceiling, wall or floor), a		
	with the CE compliance marking in compliance as per the standard TS EN 60598-		
	2014/35/EU Low Voltage Directive (LVD). Note: To be equipped with an ENEC-certified		
	a PFC value of 0.95. LEDs must be IESNA LM-80 certified. They shall have a life cycle		
	50,000 (L70) hours per the TM-21 calculation table, the color rendering index (CRI) of		
	shall be minimum 65. The projectors shall be awarded a photometric measurement r		
	IESNA LM-79 standards by an accredited laboratory, and IP degree of protection shall		
	per the TS 3033 EN 60529 standard and IK degree of protection shall be tested as p	er the IS EN	
	62262 standard. //	ila havanana	
	Gövdesi ile ön cam çerçevesi enjeksiyon alüminyum dökümden imal edilmiş, fırın boya ile b		
	ön camı temperlenmiş, 250 °C ısıya ve darbelere karşı dayanıklı, en az IP 65 koruma derecesine ve IK 09 koruma derecesine sahip, (-20 °C ile +85C°) arasında çalışabilen, (tavana, duvara, zemine)		
	montaj yapılabilmesi için gerekli montaj aparatları bulunan, projektörler ise TS EN 60598-2		
	standartlarına ve (2014/35/AB) Belirli Gerilim Sınırları İçin Tasarlanan Elektrikli Ekipman ile il		
	yönetmeliğe uygun olarak CE uygunluk işaretiyle piyasaya arz edilmiş olan projektöri	_	
	temini, her nevi malzeme ve işçilik dâhil işler halde teslimi. Not: ENEC sertifikalı veya TSE	7 7	
	veya akredite bir belgelendirme kuruluşu tarafından ürün belgesine haiz sürücülü ve		
	değeri en az 0,95 olacaktır. Kullanılan ledler IESNA LM-80 belgeli olacaktır. Kullanım		
	hesaplama tablosuna göre en az 50000 (L70) saat, renksel geriverim değeri (CRI) en az		
	Projektörler akredite bir labaratuvardan alınmış IESNA LM-79 standartlarına uygu		
	ölçüm raporuna sahip olacak, IP koruma derecesi testleri TS 3033 EN 60529 standardın	-	
	derecesi testleri TS EN 62262 standardına göre yaptırılmış olacaktır.		
Related official	35.170.4001		
pose/item	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircili	k Bakanlığı	
number, book			
İlgili resmi poz			
numarası, kitap			

Item no:	Item	Unit
Poz no:	Poz	
HRSM-ELC-06	Photovoltaic panel with minimum 400 Wp output power. // pie	
	En az 72 hücreli, en az 400 Wp çıkış gücüne sahip fotovoltaik panel	
Description/	Photovoltaic panels shall be of the number and energy capacity provided in the relevant project	
Specifications	design in 1000 W/m² radiation, AM 1.5 air mass and 25°C cell temperature conditions (in standard	
Tanım/	test conditions). The instantaneous power output tolerance of solar panels shall be maximum +3%.	
Şartname	The panels shall be equipped with by-pass diodes against power drops caused by shading. Panel	
	shall be protected to prevent passage of current when no power is generated. The panels shall have	
	a minimum system voltage of 1000 V and a maximum short inverse current protection of 15 A. Panel	
	frames shall be pressed and also punched. A drainage hole, earthing hole and installation holes shall	

be available on the frame. Installation shall be made without bolts. The frame shall be corrosionresistant and rust-free. The frame shall be designed to allow installation without drilling, etc. The glass/plastic covering the solar panels shall not reflect the sun rays. The glass shall be tempered per the standard EN 12150 and offer 91% permeability. The strength of the glass estimated per EN 12150 shall be 90 N/mm². The solar panels and fittings shall be resistant to minimum 130 km/h or 2400 Pascal wind speed and snow load (minimum 5400 Pascal). The terminal boxes of panels shall be of minimum IP 65 protection class. The back side of the panels shall comply with TS EN 61730-1 and allow installation of the panels at the relevant area. (+) and (-) terminals of the DC output cables and connectors of the panels shall be distinguishable. Cells used in the panels shall be laminated in both directions with ethylene-vinyl acetate (EVA) that complies with the standard TS EN 61215. The panels shall be capable of operating at -40 C to +85 C, at the elevation of the designated location of installation, and under a relative humidity of 0 to 85%, and compliance of the panels with the said conditions shall be guaranteed in written by the manufacturer. The photovoltaic panels shall be guaranteed for 10 (ten) years for product and physical strength, and 25 (twenty-five) years for linear energy. The linear energy warranty shall ensure minimum 90% of the panel power in 10 (ten) years and minimum 80% of the panel power in 25 (twenty-five) years. Above each panel shall be a product label affixed by the manufacturer, which at least contains the Manufacturer's name, PV Cell Type, Serial No, Nominal Power, Pmax, Voc, Isc, Dimensions and Max. System Voltage, Date of Production, and Country of Origin. Product labels shall be affixed beneath the glass, at the back of the product or on the edge of the frame in an indelible form. The contractor should submit to the Administration the flash test and EL (electroluminance) test reports of the proposed panels in digital media before the installation of the panels on site. The faults or critical cracks in panel cells, if any, shall be identified by the test reports, and those panels which are not approved shall not be used on site. The installation shall not commence before the said test reports are delivered. If the installation site is located by the sea, the result of the saltwater corrosion strength with minimum magnitude of 3 per TS EN 61701 shall be submitted to the Administration. If the installation site is located close to a farm, the result of the ammonia corrosion test per TS EN 62716 shall be submitted to the Administration. Those panels which fail to fulfill the standards required by the environmental conditions shall not be used in the system. The maximum period between the dates of production and transportation to the site of the panels to be used in the system shall be 3 (three) months. Supply, transportation to the work site and delivery in working order, including the connectors, any material and installation, of photovoltaic panels manufactured in compliance with the standards TS EN 61215, TS EN 61730-1 and TS EN 61730-2 and released with a CE marking. //

Fotovoltaik paneller 1000 W/m² ışınım, AM 1.5 hava kütlesi, 25°C hücre sıcaklığı ortam koşullarında (standart test koşullarında) projesinde belirtilen sayı ve güçte enerji üretebilecek kapasitede olacaktır. Güneş panellerinin anlık güç çıkış toleransı en fazla + %3 oranında olacaktır. Paneller gölgelemenin neden olduğu güc düsüslerine karsı by-pass diyotlu olacaktır. Enerjinin üretilmediği durumlarda panellere akım geçişi olmayacak şekilde koruma yapılacaktır. Panellerin sistem voltajı en az 1000 V, maksimum kısa ters akım koruması en az 15 A olacaktır. Panel çerçeveleri preslenmiş, aynı zamanda punch işlemi de görmüş olmalıdır. Çerçeve üzerinde drenaj deliği, topraklama deliği ve montaj delikleri bulunmalıdır. Cıvatalı olarak montajlanmış olmayacaktır. Çerçeve korozyona dayanıklı malzemeden imal edilmiş ve paslanmaz yapıda olacaktır. Çerçeve, herhangi bir delme vb. işleme gerek kalmaksızın montaj yapılabilir biçimde tasarlanmış olacaktır. Güneş panelleri kaplayan cam/plastik, güneş ışığını yansıtmayacak özellikte olacaktır. Cam EN 12150 standartlarında temperlenmiş ve en az %91 geçirgenlikte olmalıdır. Camın EN 12150 standardına göre hesaplanan dayanımı 90 N/ mm² olmalıdır. Güneş panelleri ve bağlantı elemanları en az 130 km/h ya da 2400 Pascal hızdaki rüzgara dayanabilecek kapasitede rüzgar direnci ile ayrıca kar yüküne (minimum 5400 Pascal) dayanabilecek özellikte olacaktır. Panellerin bağlantı kutusu en az IP 65 koruma sınıfında olacaktır. Panellerin arka yüzü, TS EN 61730-1'e uygun olarak panellerin ilgili sahaya montajına olanak sağlayacaktır. Panellerdeki DC çıkış kabloları ile konnektörlerin (+) ve (-) kutupları ayırt edilebilir yapıda olacaktır. Panellerde kullanılan hücreler, TS EN 61215 standardına uygun Etil Vinil Asetat (EVA) ile her iki yönde lamine olacaktır. Paneller; -40 °C ila +85 °C sıcaklık aralığında,

kurulacağı alanın bulunduğu yükseklikte, %0-85 bağıl nem oranında çalışabilecek olup panellerin söz konusu şartlara uygunluğu üretici tarafından yazılı olarak garanti edilecektir. Fotovoltaik paneller en az 10 (on) yıl ürün ve fiziksel dayanım, 25 (yirmi beş) yıl lineer enerji garantili olacaktır. Lineer enerji garantisi, panel gücünün 10 (on) yıl sonunda en az %90'ını ve 25 (yirmi beş) yıl sonunda da en az %80'ini sağlayacak şekilde olacaktır. Her bir panelin üstünde üretici tarafından panellere eklenmiş ve minimum, Üretici firmanın ismi, FV Hücre Tipi, Seri No, Nominal Güç, Pmax, Voc, Isc, Boyutlar ve MaxSistem Voltajı, İmal Tarihi, Üretilen Ülke bilgilerini ihtiva eden ürün etiketi bulunacaktır. Ürün etiketleri cam altı, ürün, arkası ya da çerçeve kenarına silinmez bir şekilde yerleştirilmiş olacaktır. Yüklenici firma teklif ettiği panellerin sahaya kurulumundan önce her bir panele ait flash test ve EL (elektrolüminans) test raporlarını dijital ortamda İdare'ye sunmak zorundadır. Test raporları sonucunda panellerdeki hücrelerde varsa bozukluklar ya da kritik hücre çatlakları tespit edilecek uygun bulunmayan paneller sahada kullanılmayacaktır. Bu test raporları teslim edilmeden kesinlikle montaj işlemine başlanmayacaktır. Kurulum yapılacak saha deniz kenarında ise TS EN 61701 minimum şiddet seviyesi 3 olacak şekilde tuzlu su korozyon dayanımı sonucu, çiftlik yakınlarında ise TS EN 62716 amonyak paslanma deneyi sonucu İdare'ye sunulacaktır. Ortam şartlarının gerektirdiği standartlara uygun olmayan paneller sistemde kullanılmayacaktır. Sistemde kullanılacak panellerin üretim tarihi ile kurulacağı sahaya sevk tarihi arasındaki süre 3 (üç) aydan fazla olmayacaktır. TS EN 61215, TS EN 61730-1 ve TS EN 61730-2 standartlarına uygun olarak üretilmiş ve CE uygunluk işareti ile piyasaya arz edilmiş fotovoltaik panelin temini, iş yerine nakli, sisteme bağlanması için gerekli bağlantı elemanları ile her nevi malzeme ve montaj dâhil çalışır halde teslimi. 35.200.1217 Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircilik Bakanlığı

Related official pose/item number, book

İlgili resmi poz numarası, kitap

Item no:	Item	Unit
Poz no: Poz		Birim
HRSM-ELC-07	Min. 5 kW solar inverter (Max. 2 mppts) //	piece
	En az 5 Kw güçlü solar inverter bağımsız MPPT sayısı 2 adede kadar olan solar	
	inverterler	
Description/	Maximum input voltage shall be minimum 1000 VDC. For 15 kW and above, the inver	ters shall have
Specifications	at least 98% maximum efficiency and 97% Euro efficiency. For below 15 kW, the maxim	num efficiency
Tanım/	shall be min. 97%, and the Euro efficiency shall be min. 96%. The inverters shall be ec	quipped with a
Şartname	RS485 communication port. THD (Total Harmonic Distortion) of the inverters shall	be < %3. The
	environmental protection of the inverters shall be minimum IP 65. The operating	g temperature
	range shall be -25 C to +60 C. The grid operating frequency range shall be 47 to 5.	2 Hz. The grid
	operating voltage range (phase-neutral) shall be 190 to 270 V. The ambient relative	humidity shall
be up to 95%. The inverters shall be equipped with a "residual curren		it" sensitive to
all terminals. The inverters shall have an integrated web server, and the following		data shall be
	accessible free of charge both on the Internet (remote monitoring system) and on the	
	throughout the life cycle of the system. Instantaneous power generation (overall and separate f	
	each panel group), energy generated per day, the energy generated since installation, panel	
	voltage, grid voltage. The system shall not require any payment throughout its life cy	cle for remote
	monitoring after the installation. The contractor shall obtain from the manufacture	
	commitment that the latter shall not charge any monitoring fee throughout the lif	e cycle of the
	system. The Protection Rate I as per TS EN 62477-1 standards and Protection Class	s III per TS EN
	60664 High Voltage Category shall be provided and each MPPT shall be protected	ed by a surge
	arrester. The inverters in compliance with the standards TS EN 62109-1, TS EN 62	
	61727, TS EN 61000-6-2, and TS EN 61000-6-3 and released with CE marking shall be	delivered with
	the connection accessories, any material and installation. //	

	Maksimum giriş gerilimi en az 1000 VDC olmalıdır. 15 kW ve üstü için invertörlerin maksimum
	verimleri en az %98, Euro verimi en az %97, 15 kW altı için maksimum verimleri en az %97, Euro
	verimi en az %96 olmalıdır. İnvertörler, RS485 haberleşme portuna sahip olacaktır. İnvertörlerdeki
	THD (Total Harmonic Distortion) < %3 olmadır. İnvertörlerin çevresel korumu sınıfı en az IP 65
	koruma sınıfına sahip olmalıdır. Çalışma sıcaklığı aralığı -25 °C ila +60 °C derece arasını kapsamalıdır.
	Şebeke frekansı çalışma aralığı en az 47 ila 52 Hz aralığında olmalıdır. Şebeke gerilimi çalışma aralığı
	(faz-nötr) en az 190 ila 270 V aralığını kapsamalıdır. Çalışma şartları bağıl nem aralığı en az %95'e
	kadar olmalıdır. İnvertörlerde tüm kutuplara duyarlı "artık akım izleme ünitesi" bulunmalıdır.
	İnvertörler entegre web sunucusuna sahip olmalı ve aşağıdaki verilere sistem ömrü boyunca ücretsiz
	olacak şekilde hem internet (uzaktan izleme sistemi) hem de invertör üzerinden erişilmelidir. Anlık
	güç üretimi (toplam ve panel grupları için ayrı ayrı), günlük enerji üretimi, kurulumdan itibaren
	üretilen enerji, panel gerilimi, şebeke gerilimi. Kurulumdan sonra uzaktan izleme uygulamalar için
	sistem ömrü boyunca haricen ücret talep edilmeyecektir. Yüklenici, üreticiden sistem ömrü boyunca
	izleme ücreti alınmayacağına dair yazılı taahhüt alacak ve İdare'ye sunacaktır. TS EN 62477-1
	standartlarında Koruma Sınıfı I, TS EN 60664 Yüksek Gerilim Kategorisine göre Koruma Sınıfı III
	olmalıdır ve her MPPT parafudr ile korunacaktır. İnvertörler TS EN 62109-1, ?TS EN 62109-2, TS EN
	61727, TS EN 61000-6-2, TS EN 61000-6-3, standartlarına uygun, CE uygunluk işareti ile piyasaya arz
	edilmiş, solar inverter bağlantı için gerekli aksesuarlar ile her nevi malzeme ve montaj dâhil çalışır
	halde teslimi.
Related official	35.200.5002
pose/item	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircilik Bakanlığı
number, book	
İlgili resmi poz	
numarası, kitap	

Item no:	Item	Unit		
Poz no:	Poz Birim			
HRSM-ELC-08	H1Z2Z2-K 6-mm² solar cable // m			
	6 mm2 solar kablo H1Z2Z2-K Solar Kablo			
Description/	Delivery in working order, including any material and labor, of solar cables manufactured as per TS			
Specifications	EN 50618. //			
Tanım/	H1Z2Z2-K Solar Kablo (Ölçü: m) TS EN 50618 standartlarına uygun olarak üretilmiş solar kablonun			
Şartname	her nevi malzeme ve işçilik dâhil işler halde teslimi.			
Related official	35.200.7004			
pose/item	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircilik Bakanlığı			
number, book				
İlgili resmi poz				
numarası, kitap				

Item no:	Item	Unit
Poz no:	Poz Birim	
HRSM-ELC-09	Earth electrode (bar) electrolytic copper // piece	
	Toprak elektrodu (çubuk), elektrolitik bakır	
Description/	Supply to the work site of a min 3.5-meter electrolytic copper bar in compliance with the TS 435/T1	
Specifications	standard, Ø20 mm in diameter, screw-mounting of a tapered head on one end to facilitate driving	
Tanım/	the bar into the ground, supply of the attachment with 4 cm threads if the bar is made up of two	
Şartname	pieces, burying the bar min. 60 cm in the ground, connection to the drop conductors and	
	surrounding conductors of the building by silver soldering or special bronze cast retaining clamps,	
	including any small material and labor. Note: If the ground is rocky, appropriate soil shall be sought	
	around that area. //	

	TS 435/T1 standardına uygun, ø 20 mm. çapında en az 3,5 m. uzunluğunda elektrolitik bakır çubuğun
işyerinde temini, toprağa çakılabilmesi için ucuna koni biçiminde bir başlığın vidalanması,	
parçadan müteşekkil olacaksa irtibatın 4 cm. boyunda diş açılarak temini, topr	
itibaren en az 60 cm. derinliğe gömülmesi, indirme iletkenlerine ve bina ihata iletken	
	kaynağı veya kızıldan özel tespit kelepçesi ile bağlanması, her nevi ufak malzeme ve işçilik dahil.Not:
	Zeminin kayalık olması halinde civarında uygun toprak aranır.
Related official	35.750.4002
pose/item	Republic of Turkey Ministry of Environment and Urbanization // T.C. Çevre ve Şehircilik Bakanlığı
number, book	
İlgili resmi poz	
numarası, kitap	

Item no:	Item	Unit
Poz no:	Poz	Birim
HRSM-ELC-10	Charge regulator: 10A // 10 amper akü şarj regülatörü	piece
Description/	12/24 volt Battery Charger (Auto Recognition)	
Specifications	Backlit LCD Display	
Tanım/		
\$artname 32bit Microprocessor Controlled		
	10-20 Ampere Charge Current	
	10-20 Amps Load Output Current	
	4-stage PWM Charging System	
	7 Different Timed Load Output Functions	
	LED Status Indicator	
	Battery Voltage Reading on LCD Screen	
	Load Current Reading on LCD	
	Output Mode Monitoring on the LCD screen	
	Electronic Insurance	
	Short Circuit Protection	
	Battery High Voltage Protection	
	Battery Low Voltage Protection	
	Panel Reverse Current Protection (Night)	
	Charge Level Temperature Compensation	
	Adjustment of Battery Type (Dry, Gel, Wet)	
	It will have RS232, RS485, Modbus Support features. //	
	12/24 volt Akü Şarjı (Otomatik Tanıma)	
	Aydınlatmalı LCD Ekran	
	32bit Mikroişlemci Kontrollü	
	10-20 Amper Şarj Akımı	
	10-20 Amper Yük Çıkış Akımı	
	4 kademeli PWM Şarj Sistemi	

pose/item	
Related official	N/A
	RS232, RS485, Modbus Desteği özelliklerinde olacaktır.
	Akü Tipinin Ayarlanabilmesi(Kuru,Jel,Sulu)
	Şarj Seviyesi Sıcaklık Kompanzasyonu
	Panel Ters Akım Koruma (Gece)
	Akü Düşük Voltaj Koruma
	Akü Yüksek Voltaj Koruma
	Kısa Devre Koruma
	Elektronik Sigorta
	LCD ekran üzerinde Çıkış Modu Takibi
	LCD ekran üzerinde Yük Akımı Okuma
	LCD ekran üzerinde Akü Voltajı Okuma
	LED Durum Göstergesi
	7 Farklı Zaman Ayarlı Yük Çıkış Fonksiyonları

Item no:	Item	Unit	
Poz no:	Poz Birim		
HRSM-ELC-11	100 Ah Solar Gel Battery // piece		
	100 Ah Solar Tip Jel Akü		
Description/	Güneş enerji sistemine uygun CE belgeli, 12 V 100 Ah özelliklerinde olacaktır. //		
Specifications	Guneş enerji sistemine uygun CE belgen, 12 v 100 An özeniklerinde olacaktır. //		
Tanım/	Güneş enerji sistemine uygun CE belgeli, 12 V 100 Ah özelliklerinde olacaktır.		
Şartname			
Related official	N/A		
pose/item			
number, book			
İlgili resmi poz			
numarası, kitap			

ANNEX 2: QUOTATION SUBMISSION FORM

Bidders are requested to complete this form, including the Company Profile and Bidder's Declaration, sign it and return it as part of their quotation along with Annex 3: Technical and Financial Offer. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.

Name of Bidder:	Click or tap here to enter text.	
RFQ reference:	UNDP-TUR-RFQ(GTWDP)-2021/034	Date: Click or tap to enter a date.

Company Profile

Item Description	Detail
Legal name of bidder or Lead entity for JVs	Click or tap here to enter text.
Legal Address, City, Country	Click or tap here to enter text.
Website	Click or tap here to enter text.
Year of Registration	Click or tap here to enter text.
Legal structure	Choose an item.
Are you a UNGM registered vendor?	☐ Yes ☐ No If yes, insert UNGM Vendor Number
Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (If yes, provide a Copy of the valid Certificate):	☐ Yes ☐ No
Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? (If yes, provide a Copy of the valid Certificate):	☐ Yes ☐ No
Does your Company have a written Statement of its Environmental Policy? (If yes, provide a Copy)	☐ Yes ☐ No
Does your organization demonstrate significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues (If yes, provide a Copy)	☐ Yes ☐ No

Is your company a member of the UN Global Compact	⊠ Yes □ No
Bank Information	Bank Name: Click or tap here to enter text.
	Bank Address: Click or tap here to enter text.
	IBAN: Click or tap here to enter text.
	SWIFT/BIC: Click or tap here to enter text.
	Account Currency: Click or tap here to enter text.
	Bank Account Number: Click or tap here to enter text.

Bidder's Declaration

Yes	No	
		Requirements and Terms and Conditions: I/We have read and fully understand the RFQ, including the RFQ Information and Data, Schedule of Requirements, the General Conditions of Contract, and any Special Conditions of Contract. I/we confirm that the Bidder agrees to be bound by them.
		I/We confirm that the Bidder has the necessary capacity, capability, and necessary licenses to fully meet or exceed the Requirements and will be available to deliver throughout the relevant Contract period.
		Ethics : In submitting this Quote I/we warrant that the bidder: has not entered into any improper, illegal, collusive or anti-competitive arrangements with any Competitor; has not directly or indirectly approached any representative of the Buyer (other than the Point of Contact) to lobby or solicit information in relation to the RFQ; has not attempted to influence, or provide any form of personal inducement, reward or benefit to any representative of the Buyer.
		I/We confirm to undertake not to engage in proscribed practices, , or any other unethical practice, with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN and we have read the United Nations Supplier Code of Conduct: https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct and acknowledge that it provides the minimum standards expected of suppliers to the UN.
		Conflict of interest: I/We warrant that the bidder has no actual, potential, or perceived Conflict of Interest in submitting this Quote or entering a Contract to deliver the Requirements. Where a Conflict of Interest arises during the RFQ process the bidder will report it immediately to the Procuring Organisation's Point of Contact.
		Prohibitions, Sanctions: I/We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/Consortium members or subcontractors or suppliers for any part of the contract is not under procurement prohibition by the United Nations, including but not limited to prohibitions derived from the Compendium of United Nations Security Council Sanctions Lists and have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization.
		Bankruptcy : I/We have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future.
		Offer Validity Period: I/We confirm that this Quote, including the price, remains open for acceptance for the Offer Validity.
		I/We understand and recognize that you are not bound to accept any Quotation you receive, and we certify that the goods offered in our Quotation are new and unused.
		By signing this declaration, the signatory below represents, warrants and agrees that he/she has been authorised by the Organization/s to make this declaration on its/their behalf.

Signature:	

Name: Click or tap here to enter text.

Title: Click or tap here to enter text.

Date: Click or tap to enter a date.

ANNEX 3: TECHNICAL AND FINANCIAL OFFER – WORKS

Bidders are requested to complete this form, sign it and return it as part of their quotation along with Annex 2 Quotation Submission Form. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.

Name of Bidder:	Click or tap here to enter text.	k or tap here to enter text.			
RFQ reference:	UNDP-TUR-RFQ(GTWDP)-2021/034	Date: Click or tap to enter a date.			

TECHNICAL OFFER

Technical offer of the bidder shall comprise the following information/sections:

Section 1: A brief description of your qualification and capacity that is relevant to the Scope of Works;

- 1.1. General organizational capability which is likely to affect implementation: management structure, financial stability and project financing capacity, project management controls, etc.
- 1.2. Relevance of specialized knowledge and experience on similar engagements done in the region/country.

Previous Experience:

Note: For demonstrating previous relevant experience, bidders shall use the following table and attach Work Completion Certificate which should include the information recorded in the table at minimum.

Please list only previous similar assignments (i.e. construction of any kind of buildings, steel structures) successfully completed in the **last 3 years** at a minimum contract amount of **500,000 TRY**.

List only those assignments for which the Bidder was legally contracted by the Client as a company or was one of the Consortium/JV partners. Assignments completed by the Bidder's individual experts working privately or through other firms cannot be claimed as the relevant experience of the Bidder, or that of the Bidder's partners or sub-consultants, but can be claimed by the Experts themselves in their CVs. The Bidder shall provide proof documents for the claimed experience by presenting copies of relevant documents and references with the Bid.

Project name & Country of Assignment	Client & Reference Contact Details	Contract Value (in TRY equivalent*)	Period of activity and status	Types of activities undertaken

^{*}Bidders shall convert the currency quoted in the "Certificate of Completion" into TRY, in accordance with the prevailing UN operational rate of exchange on the contract date stated by "Certificate of Completion". UN operational rate of exchange are available at the following website: https://treasury.un.org/operationalrates/OperationalRates.php#E

1.3. Financial Standing:

Minimum average annual turnover of the bidder for the last 3 years (2018, 2019 and 2020) shall not be less than of 500,000 TRY. For demonstrating compliance with financial standing requirements, bidders

shall complete following tables and submit copies of the audited financial statements (balance sheets, including all related notes, and income statements) for the relevant years.

Annual Turnover for the last 3 years	Year	TRY
	Year	TRY
	Year	TRY
Latest Credit Rating (if any), indicate the source		

Financial information (in TRY equivalent)	Historic information for the last 3 years						
	Year 1	Year 2	Year 3				
	Info	rmation from Balance S	heet				
Total Assets (TA)							
Total Liabilities (TL)							
Current Assets (CA)							
Current Liabilities (CL)							
	Inforn	nation from Income Stat	ement				
Total / Gross Revenue (TR)							
Profits Before Taxes (PBT)							
Net Profit							
Current Ratio							

For TRY Equivalent; Bidders shall convert the currency into TRY by using the UN operational rate of exchange which was effective for 31st December of each corresponding year. UN operational rate of exchange are available at the following website: https://treasury.un.org/operationalrates/OperationalRates.php#E

<u>Bidders shall submit copies of the audited financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following condition:</u>

- Must reflect the financial situation of the Bidder or party to a JV, and not sister or parent companies;
- b) Historic financial statements must be audited by a certified public accountant;
- c) Historic financial statements must correspond to accounting periods already completed and audited. No statements for partial periods shall be accepted.

Section 2: A brief method statement and implementation plan;

- 3.1. Description of how the Bidder will complete civil works, keeping in mind the appropriateness to local conditions and project environment.
- 3.2. Implementation plan including a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing.

Section 3: Team Composition and CVs of key personnel

- 3.1. Include an organization chart for the management of the project describing the relationship of key positions and designations.
- 3.2. Provide CVs for key personnel using the format below. Bidders should also submit the Diplomas of proposed Personnel.

Format for CV of Proposed Key Personnel (Min 5 years of similar experience)

Name of Personnel	[Insert]
Position for this assignment	[Insert]
Nationality	[Insert]
Language proficiency	[Insert]
Education/	[Summarize college/university and other specialized education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.]
Qualifications	[Insert]
	[Provide details of professional certifications relevant to the scope of goods and/or services]
Professional certifications	Name of institution: [Insert] Date of certification: [Insert]
Employment Record/ Experience	[List all positions held by personnel (starting with present position, list in reverse order), giving dates, names of employing organization, title of position held and location of employment. For experience in last five years, detail the type of activities performed, degree of responsibilities, location of assignments and any other information or professional experience considered pertinent for this assignment.]
	[Insert]
	[Provide names, addresses, phone and email contact information for two (2) references]
References	Reference 1: [Insert]
	Reference 2: [Insert]

I, the undersigned, certify that to the best of my knowledge and belief, the data provided above correctly describes my qualifications, my experiences, and other relevant information about myself.

Signature of Personnel Date (Day/Month/Year)

FINANCIAL OFFER

Price Schedule Form / Bill of Quantities

This Bill of Quantities is an itemized breakdown of the works to be carried out, indicating a quantity for each item and the corresponding unit price. The quantities set out in this Bill of Quantities are estimated quantities.

The amounts due shall be determined through the measurement of the actual quantities of the works executed and by applying the unit rates to the quantities actually executed for the respective items.

The prices inserted in the Bill of Quantities are to be the full inclusive values of the works described under the items, including all costs and expenses which may be required in and for the construction of the works described together with any temporary works and installations which may be necessary, and all general risks, liabilities and obligations set forth or implied in the documents on which the tender is based. It will be assumed that establishment charges, profit and allowances for all obligations are spread evenly over all the unit rates.

No specific payment will be made against transportation of materials to the site.

Unless the technical specifications or the Bill of Quantities specifically and expressly state otherwise, only permanent works are to be measured and paid for by UNDP.

No allowance will be made for loss of materials or volume thereof during installation, transport or compaction.

UN and its subsidiary organs are exempt from all taxes. Therefore, the prices shall exclude Value Added Tax (VAT). The Contractor to be selected shall not be entitled to receive any amount over the prices in relation to VAT, Special Consumption Tax and any other applicable taxes.

In the bill of quantities, rates and prices shall be entered by the Contractor in the appropriate columns in TRY. In the Unit Price column in the Bill of Quantities Unit Rates shall include the overheads. "Overheads" shall be deemed to cover:

- i. Profit
- ii. Head Office charges
- iii. Site Supervision and Site Staff costs and expenses
- iv. Transport of labour and travelling allowances
- v. Use of protective clothing or equipment
- vi. Any statutory or incidental charges levied on the employment of labour
- vii. Overtime, unless specifically ordered or subsequently sanctioned in writing by the Engineer
- viii. Time lost due to inclement weather
- ix. Insurances of whatsoever nature
- x. Holiday and sickness pay or benefits
- xi. Use, repair and sharpening of small tools
- xii. All non-mechanically operated equipment, erected scaffolding, staging and trestles, protective clothing, artificial lighting, storage facilities and the like that may be in general use on the site
- xiii. All other liabilities and obligations whatsoever

The works described in this section include all the necessary materials and losses, loading, horizontal and vertical transportation, unloading, workmanship, transportation of material to the site, contractor's profit and general expenses for the successful completion of the specified items.

Whenever item/pose is related to an item/pose number from the official books published by Turkish public institutes, the definition in this specification shall prevail for any inconsistency. In case of vagueness/absence of an issue in the item definition in this specification, the official definition shall prevail for only the vagueness/absence.

The units of measurement used in the items/pose definitions are those of the International System of Units (SI). No other units may be used for measurements, pricing, detail drawings etc. (Any units not mentioned in the technical documentation must also be expressed in terms of the SI.) Abbreviations used are to be interpreted as follows:

m means metre

m² means square metre

m³ means cubic metre

kg means kilogram

ton means tons

pcs means pieces
L.s. means Lump sum

Note: Manufacturing descriptions in the bill of quantity were prepared by using the pose descriptions in Ministry of Urban and Environmental Planning, General Directorate of Foundations, Ministry of Culture and Tourism, and TEDAŞ unit price books. In case of any dispute between the contractor and UNDP during construction, the poses of any above-mentioned institutions will be based on. In addition, In the technical and financial applications of the above construction poses, the analysis of the poses in the relevant standards of institutions will be considered and implemented too.

Unit Price Financial Offer BİRİM FİYAT TEKLİF CETVELİ

S. No	Teklif Poz No Item No	Tanımı / Discription	Br. Unit	Miktar Quantity	Birim Fiyat Unit Price (TRY)	Tutar Total Price (TRY)
1	HRSM-CIV-	Excavation works by machine without using explosives (Deep and free excavation)	m³	300.00		
	01	Makine ile patlayıcı madde kullanmadan yapılan kazı işleri (Derin ve Serbest kazı)	""	300.00		
2	HRSM-CIV- 02	Supply, and machine laying, watering and compacting of gravel Çakıl temin edilerek, makine ile serme, sulama ve sıkıştırma yapılması	m ³	3.00		
3	HRSM-CIV- 03	Pouring the regular ready-mix concrete of C16/20 compressive strength class, grey color, produced at cement plant or purchased and pumped by the cement pump (including transport of concrete)	. m³	3.00		
		Beton santralinde üretilen veya satın alınan ve beton pompasıyla basılan, C 16/20 basınç dayanım sınıfında, gri renkte, normal hazır beton dökülmesi (beton nakli dahil)				
4	HRSM-CIV- 04	Pouring of gray, regular, ready-mix concrete of compressive strength class C25/30, manufactured in a concrete plant or purchased, and pumped by a concrete pump (including transportation of concrete)	m³	20.00		
	04	Beton santralinde üretilen veya satın alınan ve beton pompasıyla basılan, C 25/30 basınç dayanım sınıfında, gri renkte, normal hazır beton dökülmesi (beton nakli dahil)				
-	HRSM-CIV-	Cutting, bending and placement of Ø 8- Ø 28 mm deformed concrete steel bars	ton	n 2.000		
5	05	Ø 8- Ø 28 mm nervürlü beton çelik çubuğu, çubukların kesilmesi, bükülmesi ve yerine konulması	ton			
6	HRSM-CIV- 06	Manufacturing and installing various iron works of sheet metals, sheet bars and shape iron	kg	3,000.00		
0		Sac levhalar, lama ve profil demirlerden çeşitli demir işleri yapılması ve yerine konulması	ĸy			
7	HRSM-CIV-	Supply, installation and assembly of framing construction with any type of profiled steel, steel bars and sheets	ton	4.00		
,	07	Her çeşit profil, çelik çubuk ve çelik saclarla karkas (çerçeve) inşaat yapılması, yerine tespiti		4.00		
8	HRSM-CIV- 08	Production of reinforced concrete plain surface form works with plywood	m²	50.00		
	00	Plywood ile düz yüzeyli betonarme kalıbı yapılması				
9	with plaston (flexural stre felt carrier of 9 3 mm kalınl tülü taşıyıcı bükülmeli) p	Water insulation of two layers with polymer bituminous covers with plastomer-based fiberglass carrier of 3 mm in thickness (flexural strength of-5 degrees) and plastomer-based polyester felt carrier of 3 mm in thickness (flexural strength of-5 degrees)	m ²	m² 50.00		
9		3 mm kalınlıkta plastomer esaslı (-5 °C soğukta bükülmeli) cam tülü taşıyıcılı ve 3 mm kalınlıkta plastomer esaslı (-5 °C soğukta bükülmeli) polyester keçe taşıyıcılı polimer bitümlü örtüler ile iki kat su yalıtımı yapılması	1111			
10	HRSM-CIV-	Roofing with 0.50-mm thickness hot-dip galvanized grooved/trapezoidal sheet metal on steel or precast reinforced concrete beams.	m²	100.00		
10	10	Çelik veya ön yapımlı betonarme kiriş üzerine 0.50 mm kalınlıkta sıcak daldırma galvanizli oluklu/trapez sac ile çatı örtüsü yapılması.	- 111	100.00		
11	HRSM-CIV- 11	Flooring with cobble stone of steam cured regular cement at 8 cm of height (at all sizes, colours and patterns)	m²	100.00		

HRSM-CIV- Paving border stones of S0x20x10 cm in size, of steam cured regular coment (finished surface, all colours) 50 x 20 x 10 cm beyullarnda normal cimentolul buhar kūrlū beton bordici dolgermasei (partit, her rank) Fall till partity (partity partity			8 cm yüksekliğinde normal çimentolu buhar kürlü beton parke taşı ile döşeme kaplaması yapılması (her ebat, renk ve desende)			
12 50 x 20 x 10 cm boyuttannda normal gimentolu buhar kiriri beton bodru dospremed junkih, her rank) 13 HRSM-CIV- 13 HRSM-CIV- 14 HRSM-CIV- 15 FRSM-CIV- 16 HRSM-CIV- 16 HRSM-MEC- 17 HRSM-MEC- 18 Granting the increase with two layers of solvent-based epoxy paint 19 HRSM-EIV- 19 HRSM-EIV- 10 Santanesine uygun krigikkap hayvan portalit rampasi (maktu) 10 Santanesine uygun krigikkap hayvan portalit rampasi (maktu) 11 Santanesine uygun krigikkap hayvan portalit rampasi (maktu) 15 Santanesine uygun krigikkap hayvan portalit rampasi (maktu) 16 HRSM-MEC- 17 HRSM-MEC- 18 HRSM-MEC- 19 HRSM-EIV- 19 HRSM-EIV- 10 University of the increase of the properties of the	10	HRSM-CIV-	•	m	CO 00	
13	12	12	, ,	111	00.00	
HRSM-CIV- HRSM	13		epoxy paint	m²	250.00	
14 HRSM-CIV- 14 HRSM-CIV- 15 HRSM-CIV- 15 HRSM-CIV- 15 HRSM-MEC- 01 Santamesine uygun küçükbaş hayvan portatif rampası (maktu) 16 HRSM-MEC- 01 Santamesine gakanzil sacdan seyyar sıvat yapımı 17 HRSM-MEC- 02 Küçükbaş hayvan baskülü 18 HRSM-MEC- 03 Small livestock bethining machine in accordance with the specification 18 HRSM-MEC- 09 Küçükbaş hayvan baskülü 19 HRSM-ELC- 10 HRSM-ELC		10	Demir yüzeylere iki kat solvent bazlı epoksi boya yapılması			
Santamesine uygun küçükbas hayvan portatif rampası (maktu)	14			ad/pc	2	
15 HRSM-CIV- 16 HRSM-MEC- 01 Sarnamesine galvanizli sacdan seyyar sivat yapımı Small livestock battının machine in accordance with the specification Şarnamesine uygun koyun ilaçlama makinesi 17 HRSM-MEC- 02 Small livestock weigh-scales Sirt pulvarizatörü 18 HRSM-MEC- 03 Surface-mounted galvanized steel electric panels from 0.20 to 0.30 m² (including 0.30 m²) 0.20 - 0.30m² ye kadar (0.30 m²) 0.20 - 0.30m² ye kadar (0.30 m² dahil) sıva üstü galvaniz sac tabiolar 18 HRSM-ELC- 02 HRSM-ELC- 03 Installation of supply lines using lead-free, PVC insulated NVV (NYM) type cables: 3 x 2.5 mm² (NYM) type cables in type cable type type type type type type type typ		• •	Şartnamesine uygun küçükbaş hayvan portatif rampası (maktu)			
Saftnamesine galvanizii sacdan seyyar sivat yapmi	15			ad/pcs	4	
16		15	Şartnamesine galvanizli sacdan seyyar sıvat yapımı			
Sartnamesine uygun koyun laqlama makinesi 17	16			ad/pcs	2	
17		UI	Şartnamesine uygun koyun ilaçlama makinesi			
18	17	HRSM-MEC-	Small livestock weigh-scales	ad/pag	2	
18	17	02	Küçükbaş hayvan baskülü	au/pcs	2	
19	40	HRSM-MEC-	Backpack sprayers	.,		
19	18	03	Sırt pulvarizatörü	ad/pcs	2	
10	10	HRSM-ELC-		ad/pcs	2	
HRSM-ELC- O2	19	01				
HRSM-ELC- HRSM-ELC- HRSM-ELC- Of Of HRSM-ELC- Of Of Of Of Of Of Of O	20		(NYM) type cables: 3 x 2.5 mm ²	m	120.00	
HRSM-ELC- 1/2		02				
18	21			m	80.00	
All		03			00.00	
HRSM-ELC- HRSM-ELC- HRSM-ELC- 08 HRSM-ELC- 09 HRSM-ELC- 09 HRSM-ELC- 09 HRSM-ELC- 09 HRSM-ELC- Charge regulator: 10A HRSM-ELC- HRSM-ELC- Charge regulator: 10A HRSM-ELC- Charge regulator: 10A HRSM-ELC- Charge regulator: 10A HRSM-ELC- Charge regulator: 10A HRSM-ELC- Charge regulator: 10A HRSM-ELC- Charge regulator: 10A HRSM-ELC- Charge regulator: 10A LED projectors; min. 2500 Im light flux, max. 30 W consumption. Advance. Advanc	22			m	10.00	
HRSM-ELC- 05 HRSM-ELC- 05 HRSM-ELC- 06 Photovoltaic panel with minimum 400 Wp output power. En az 72 hücreli, en az 400 Wp çıkış gücüne sahip fotovoltaik panel Min. 5 kW solar inverter (Max. 2 mppts) En az 5 Kw güçlü solar inverter bağımsız MPPT sayısı 2 adede kadar olan solar inverterler HRSM-ELC- 08 HRSM-ELC- 09 HRSM-ELC- 09 HRSM-ELC- 09 Captility Charge regulator: 10A Ad/pcs		04				
Led projetor, işik akisi en az 3500 im, armatur işiksal verimi en az 110 lm/w Photovoltaic panel with minimum 400 Wp output power. En az 72 hücreli, en az 400 Wp çıkış gücüne sahip fotovoltaik panel Min. 5 kW solar inverter (Max. 2 mppts) En az 5 Kw güçlü solar inverter bağımsız MPPT sayısı 2 adede kadar olan solar inverterler HRSM-ELC- 08 HRSM-ELC- 08 HRSM-ELC- 09 HRSM-ELC- 09 Earth electrode (bar) electrolytic copper Toprak elektrodu (çubuk), elektrolitik bakır Charge regulator: 10A Photovoltaik panel ad/pcs ad/pcs ad/pcs ad/pcs 2 ad/pcs 2 Ad/pcs 2 Ad/pcs 2	23		consumption.	ad/ncs	6	
24 HRSM-ELC- En az 72 hücreli, en az 400 Wp çıkış gücüne sahip fotovoltaik panel ad/pcs 16 En az 72 hücreli, en az 400 Wp çıkış gücüne sahip fotovoltaik panel ad/pcs 16 En az 72 hücreli, en az 400 Wp çıkış gücüne sahip fotovoltaik panel ad/pcs 2 En az 5 Kw güçlü solar inverter bağımsız MPPT sayısı 2 adede kadar olan solar inverterler 4 HRSM-ELC- H1Z2Z2-K 6-mm² solar cable 6 6 6 6 6 6 6 6 6		05	az 110 lm/w	/p.22		
panel Min. 5 kW solar inverter (Max. 2 mppts) En az 5 Kw güçlü solar inverter bağımsız MPPT sayısı 2 adede kadar olan solar inverterler HRSM-ELC- 08 HRSM-ELC- 09 HRSM-ELC- 09 Earth electrode (bar) electrolytic copper Toprak elektrodu (çubuk), elektrolitik bakır Charge regulator: 10A Min. 5 kW solar inverter (Max. 2 mppts) ad/pcs 2 ad/pcs 2 ad/pcs 2 ad/pcs 2	24			ad/pcs	16	
25 HRSM-ELC- 07 En az 5 Kw güçlü solar inverter bağımsız MPPT sayısı 2 adede kadar olan solar inverterler 26 HRSM-ELC- 08 HRSM-ELC- 09 Earth electrode (bar) electrolytic copper Toprak elektrodu (çubuk), elektrolitik bakır 28 HRSM-ELC- 10 Charge regulator: 10A 29 ad/pcs 20 ad/pcs 20 ad/pcs 20 ad/pcs 20 ad/pcs 20 ad/pcs 20 ad/pcs						
107 End of Waggle Solar Inverter Engine III To Saylis End of Engine III To Saylis End of End of Engine III To Saylis End of End of Engine III To Saylis End of End of Engine III To Saylis End of Engine III To Saylis End of Engine III To Saylis End of Engine III To Saylis End of Engine III To Saylis End of Engine III To Saylis End of Engine III To Saylis End of Engine III To Saylis End of End of Engine III To Saylis End of End of End of End of Engine III To Saylis End of End	0.5	HRSM-ELC-				
26 08 6 mm2 solar kablo H1Z2Z2-K Solar Kablo 27 HRSM-ELC- 09 Toprak elektrodu (çubuk), elektrolitik bakır 28 HRSM-ELC- 10 Charge regulator: 10A ad/pcs 2 ad/pcs 2	25	07		ad/pcs	d/pcs 2	
08 6 mm2 solar kablo H1Z2Z2-K Solar Kablo 27 HRSM-ELC- 09 Earth electrode (bar) electrolytic copper Toprak elektrodu (çubuk), elektrolitik bakır ad/pcs 2 28 HRSM-ELC- 10 Charge regulator: 10A ad/pcs 2	26		H1Z2Z2-K 6-mm² solar cable	m	300.00	
27 09 Toprak elektrodu (çubuk), elektrolitik bakır 28 HRSM-ELC- Charge regulator: 10A ad/pcs 2		08	6 mm2 solar kablo H1Z2Z2-K Solar Kablo	111	200.00	
28 HRSM-ELC- Charge regulator: 10A ad/pcs 2	07	HRSM-ELC-	Earth electrode (bar) electrolytic copper	od/5		
28 THOMPLEO ad/pcs 2	۷1		Toprak elektrodu (çubuk), elektrolitik bakır	au/pcs	.a/pcs 2	
20 10 10 amper akij sari regijlatörij ad/pcs 2	20	HRSM-ELC-	Charge regulator: 10A	od/225	^	
To amper and şarj regulatoru	28	S	10 amper akü şarj regülatörü	ad/pcs	2	

29	HRSM-ELC-	100 Ah solar gel battery	ad/pc	2		
	11	100 Ah solar jel akü	0.0%			
	TOPLAM / TOTAL PRICE (TRY)					

SUMMARY TABLE:

Section	Description	TOTAL PRICE (TRY)
1	CIVIL WORKS	
	TOTAL ESTIMATED PRICE	

Compliance with Requirements

	You Responses		
	Yes, we will comply	No, we cannot comply	If you cannot comply, pls. indicate counter - offer
Minimum Technical Specifications and requirements stipulated in the Bill of Quantities			
and Schedule of Requirements			Click or tap here to enter text.
Substantial Completion of works (60 calendar days after given access to the site)			Click or tap here to enter text.
Validity of Quotation			Click or tap here to enter text.
Payment terms			Click or tap here to enter text.

I, the undersigned, certify that I am duly authorized to sign this quotation and bind the company below in event that the quotation is accepted.					
Exact name and address of company	Authorized Signature:				
Company NameClick or tap here to enter text.	Date:Click or tap here to enter text.				
Address: Click or tap here to enter text.	Name:Click or tap here to enter text.				
Click or tap here to enter text.	Functional Title of Authorised				
Phone No.:Click or tap here to enter text.	Signatory:Click or tap here to enter text.				
Fmail Address: Click or tan here to enter text	Email Address: Click or tap here to enter text.				

ANNEX 6: FORM OF BID SECURITY

Bid Security must be issued using the official letterhead of the Issuing Bank. Except for indicated fields, no changes may be made on this template.

To:UNDP

[Insert contact information as provided in Data Sheet]

WHEREAS [Name and address of Bidder] (hereinafter called "the Bidder") has submitted a Bid to

UNDP dated Click here to enter a date. to execute goods and/or services [Insert Title of Goods and/or Services] (hereinafter called "the Bid"):

AND WHEREAS it has been stipulated by you that the Bidder shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security if the Bidder:

- a) Fails to sign the Contract after UNDP has awarded it;
- b) Withdraws its Bid after the date of the opening of the Bids;
- c) Fails to comply with UNDP's variation of requirement, as per ITB instructions; or
- d) Fails to furnish Performance Security, insurances, or other documents that UNDP may require as a condition to rendering the contract effective.

AND WHEREAS we have agreed to give the Bidder such Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Bidder, up to a total of [amount of guarantee] [in words and numbers], such sum being payable in the types and proportions of currencies in which the Price Bid is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of [amount of guarantee as aforesaid] without your needing to prove or to show grounds or reasons for your demand for the sum specified therein. This guarantee shall be valid up to 30 days after the final date of validity of bids.

SIGNATURE AND SEAL OF THE GUARANTOR BANK

Signature:	
Name:	_
Title:	
Date:	
Name of Bank	
Address	
[Stamp with official stamp of the Bank]	
[insert: address and email address]	