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Acronyms used in this report

AGAVEPOR Galician Porcine Veterinary Association
ANEMBE	..... Spanish Association of Bovine Medicine Specialists
ASOPORCEL	... Galician Association of Autochthonous Porcine Breeders
AVEE	..... Spanish Equine Veterinary Association
AVEPA	..... Spanish Association of Veterinarians Specialists in Small Animals
CEVE	..... Spanish Veterinary Business Confederation
COREN	..... Galician agri-food Cooperative
EAEVE	..... European Association for the Establishment of Veterinary Education
EBVS	..... European Board of Veterinary Specialisation
ECOVE	..... European Committee of Veterinary Education
ECTS	.....European Credit Transfer and Accumulation System
ENQA	..... European Association for Quality Assurance
ESVET	..... European System of Evaluation of Veterinary Training
FVL	..... Veterinary Faculty of Lugo
GESUGA	..... Galician Meat By-products Manager
GTCS	..... Semester Coordination Working Group
HIS-VET	.....HVURC digital management of clinical records
HVURC	..... Veterinary Teaching Hospital
LHC	..... Clinical Skills Lab
OSCE	..... Objective Structured Clinical Examination
POD	..... Teaching Organization Plan
SER	..... Self Evaluation Report
USC	..... University of Santiago de Compostela

Introduction

The Veterinary Faculty of Lugo (FVL) was assessed by the EAEVE Visitation Team in September 24 to 28, 2018. In addition to areas worthy of praise, insufficient clinical training in common animal species, especially in equine and porcine, and in porcine food safety and quality were identified as a major deficiency.

In addition, the visitation team identified several minor deficiencies, including:

- Insufficient autonomy of the Establishment for departmental restructuring and staff recruitment
- Insufficient training in functional sciences
- Insufficient housing and examination facilities for horses and pigs and the new farm not yet being built and fully functional
- Insufficient number of equine necropsies
- Insufficient caseload of horses and pigs
- The structure of the clinical training not allowing the active participation of undergraduate students in the full investigation and follow-up of patients
- Unexplained accumulation of students in the 5th year
- Sub-optimal assessment of Day One Competences
- Insufficient recruitment of junior staff and because of insufficient specialized academic staff in some key clinical disciplines
- Absence of residency programs in most common clinical disciplines
- Insufficient involvement of external stakeholders in Quality Assurance.

The faculty is extremely grateful to the evaluators for their valuable suggestions for improving the teaching quality of our institution. FVL has assumed the opinion of the experts, and numerous actions have been taken to correct this major deficiency and to respond to the raised suggestions for improvement related to the minor deficiencies.

Some measures involving modifications in the programs of different subjects oriented to increase hands on training and improving the practical contents, required the approval of the Faculty Council (May 14, 2019) and University of Santiago de Compostela (USC) Government Board (July 18, 2019).

Other actions involved structural reforms of the hospital facilities, or signature of agreements with the Provincial Government of Lugo to finalize the new teaching farms.

New agreements with associations, companies and farms were adopted in order to improve practical teaching according to EAEVE Standards.

In summary, the faculty has dealt conscientiously with the implementation of measures that address the correction of the Major and Minor Deficiencies so as to be fully compliant with the ESEVT Standards. We are confident that our Establishment now will comply with the EAEVE Requirements.

1. Correction of the Major Deficiency

1.1. Major deficiency: non-compliance with sub-standard 3.5, because of insufficient clinical training in common animal species, especially in equine and porcine, and in porcine food safety and quality

EXTRACT FROM THE FINAL REPORT AS ISSUED BY ECOVE ON 22 NOVEMBER 2018

3.5.2.2. Comments

Clinical propaedeutics are given only in dogs and cattle and would be beneficial using Faculty owned pigs and horses as well.

The programme of the clinical rotations includes a high number of learning outcomes, which are described as to complement the academic training. At least 62 clinical tasks have to be performed and assessed for each student. An emergency service is offered for all species, and students have to perform night duties also during these two weeks. This seems to be too short a period and very demanding to complete all tasks and to gain sufficient training and experience in all species and disciplines.

3.5.2.3. Suggestions for improvement

- Increase the duration (ECTS) of clinical rotations for small animals, equine and farm animals significantly.
- Introduce regular clinical propaedeutics in horses and pigs.

3.5.3.2. Comments

...The development of the new farm is to be welcomed and will be a very important addition to the Establishment's facilities supporting teaching (and research). Students need to see more pigs either at the Establishment or elsewhere.....

3.5.3.3. Suggestions for improvement

The new dairy farm should be finished as a matter of urgency to optimise/maximise its use in teaching using not just the animals, but also the production, health, nutrition and other data it can generate to promote Herd Health Management teaching.

3.5.4.2. Comments

...The absence of visits to a pig slaughterhouse could have been compensated by extensive teaching in pig farms and high caseload of pig cadavers for necropsy. However, this is not the case as the main focus in food production animals is on cattle.

3.5.4.3. Suggestions for improvement

Teaching in the "from farm to fork" porcine value chain needs to be improved.

FVL should encourage their teachers in Food Safety and Quality to explore synergies with other related subjects across departmental borders to offer training that puts the veterinary responsibility for food production and safety into a clear One Health perspective.

3.5.6. Decision

The Establishment is not compliant with sub-standard 3.5, because of insufficient clinical training in common animal species, especially in equine and porcine, and in porcine food safety and quality.

The final report as issued by ECOVE on 22 November 2018 concludes that the FVL was not compliant with sub-standard 3.5, because of "*insufficient clinical training in common animal species, especially in equine and porcine, and in porcine food safety and quality*". At the same

time, it indicates a series of suggestions for improvement on different aspects that lead to non-compliance with sub-standard 3.5.

FVL has assumed the opinion of the experts, and numerous actions have been taken to correct this major deficiency and respond to the raised suggestions for improvement. All necessary modifications of the curriculum oriented to correct the major and minor deficiencies have been approved by the Faculty Council (May 14, 2019) and USC Government Board (July 18, 2019).

All actions aimed at correcting this major deficiency will be addressed in 5 separate points that contemplate and collect all comments and suggestions for improvement in order to make a clearer presentation. These points are:

1. *Insufficient clinical training in equine*
2. *Insufficient clinical training in porcine*
3. *Insufficient training in porcine food safety and quality*
4. *Increase the duration (ECTS) of clinical rotations for all animals significantly*
5. *Finalize the new dairy farm and optimize its use to improve the teaching of Herd Health Management*

1.1.1. Insufficient clinical training in equine

1.1.1.1. Factual information

The Establishment was not compliant with sub-standard 3.5 because of insufficient clinical training in common animal species, especially in equine.

Clinical Propaedeutics are given only in dogs and cattle and would be beneficial using Faculty owned pigs and horses as well, so the suggestion for improvement was to Introduce regular clinical propaedeutic in horses.

1.1.1.2. Comments

To increase the clinical practice in horses, two lines of action were implemented: measures aimed at obtaining new animal resources (horses), and modifications in the programmes of different subjects oriented to increase clinical practice in horses.

1.1.1.2.a. Measures aimed at obtaining new animal resources:

- New housing and examination facilities for horses at the Veterinary Teaching Hospital (HVURC) (see correction of minor deficiency 3 - Substandard 4.7)
- New agreements with equestrian farms (see correction of minor deficiency 5 - Substandard 5.2)
- Agreement with the company in charge of the waste management of animal cadavers in Galicia to guarantee at least one equine cadaver every week (see correction of minor deficiency 4 - Substandard 5.1).

1.1.1.2.b. Modifications in the programmes of different subjects oriented to increase clinical practice in horses

The core subject **Clinical Propaedeutics** has introduced two modules of equine clinical practice, 3 hours each, dedicated to the exploration of horses. They will address the following aspects:

- Horse handling
- Oral and parenteral administration routes
- Obtention of body temperature and other vital signs
- Exploration of lymph nodes, head, neck and thorax (cardiorespiratory system)
- Abdomen examination
- Examination of the musculoskeletal system
- Examination of the nervous system

The **new practicals on horses** (6 hours), in place from the academic year 2019-20, were developed on 2 Faculty horses housed at the VTH Rof Codina, under teacher supervision.

In the first semester of the academic year 2020-2021 practicals of **Clinical Propaedeutics** were increased from 35 to 37 hours per student and carried out at the VTH Rof Codina, under teacher supervision, on cows, dogs, and horses, with a total duration for horses of 6 hours, divided in two 3-hours sessions. To compensate the half reduction of the size of the groups and the time for practicals, students were working with guides and videos on the different exploration techniques.

The core subject **Veterinary Diagnostic Imaging** has introduced 5 hours of lectures oriented to imaging diagnostic in horses, and 1.5-hours of clinical practice dedicated to equine clinical hands-on, where each student should carry out a basic radiographic and ultrasound examination on horses under the teacher's supervision.

In the academic year 2019-20, **3 hours of lectures**, specially oriented to diagnostic imaging in horses (large animal musculoskeletal system, ultrasonographic evaluation of the musculoskeletal system in large animals, and nuclear medicine) were taught. Furthermore, a **1.5-hour new practical session** on basic radiographic and ultrasound exploration in horses was carried out under the teacher supervision at the VTH Rof Codina.

In addition to the changes made the previous year, in the academic year 2020-21, **2 hours of new lectures** oriented to diagnostic imaging in horses (respiratory system and abdominal ultrasonography in large animals) and a **2-hours practical session** oriented to the basic radiographic and ultrasound exploration in horses, have been introduced in the program of the subject. Unfortunately, a transient problem on the compatibility of the new contracts with the USC of the veterinarians working at the VTH Rof Codina prevented the teaching of this practicals. Supplementary material has been uploaded to the virtual USC to compensate this situation.

The core subject **Veterinary Anaesthesia and Reanimation**, will dedicate 5 practical hours to equine clinical activities:

- Particularities of general anaesthesia in horses
- Evaluation of the anaesthetic risk of the patient
 - Complete exploration of the horse
 - Registration of cardiorespiratory parameters
- Anaesthetic protocols in horses
 - Patient preparation
 - Premedication
 - Induction box handling
 - Anaesthesia equipment for large animals
 - Patient monitoring
 - More frequent complications during anaesthesia and how to treat them
 - Anaesthetic recovery
- Main locoregional blocks in the horse.

In the first semester of the academic year 2019-2020, **5 new hours of practicals**, specially oriented to anaesthesia in horses were taught.

In the first semester of the academic year 2020-21 practicals were taught at the VTH Rof Codina under teacher supervision with half reduction of the size of the groups and the time for practicals, compensating the rest of hours with resolution of clinical cases and a test. Unfortunately, a transient problem on the compatibility of the new contracts with the USC of the veterinarians working at the VTH Rof Codina prevented the teaching of the 2.5-hours practicals on horses. To compensate it, students prepared a clinical case on horse anaesthesia and had 3 hours in seminars.

The core subject **Clinical Veterinary Medicine and Surgery II**, has introduced 5 practical hours to the diagnosis of equine lameness:

- Static and dynamic examination of horse movements
- Differential diagnosis of lameness
- Practice of anaesthetic blocks on anatomical pieces and real horses.

In the second semester of the academic year 2019-20 the 5 hours practicals per student on horse lameness were taught. From 15 March (scenario 3, confinement period) this practical was compensated with online materials.

In the second semester of the academic year 2020-21 will apply half reduction of the size of the groups and the time for practicals, compensating the rest of hours with online materials.

The core subject **Infectious Diseases I**, for a long time, has included a 4-hour practice activity in a jumping horse farm (breeding and sports) in which various aspects are addressed:

- Risk factors and assessment of the health situation of the farm
- Treatment and control of infectious diseases:
 - Biosecurity measures carried out in the equestrian center and assessment of their effectiveness in preventing the entry and dissemination of mandatory declaration diseases (listed by the OIE)
 - Assessment of the facilities and management of animals with respect to the appearance and dissemination of infectious diseases, with special interest in the cleaning and disinfection of boxes and transportation vehicles
 - Preventative measures to be applied in the event that an infectious disease appears; special attention is given to the study of West Nile Fever, as this is a disease whose cases are increasing in Spain
 - Vaccination and deworming guidelines that are carried out at the center: assessment of their effectiveness and possible improvements
 - Best way to collect samples for the diagnosis of official control diseases (equine infectious metritis and equine viral arteritis).

In the second semester of the academic year 2019-2020 this 4-hours practical was carried out normally by all students before the date of the confinement and it is expected to be the same in the second semester of the academic year 2020-21.

HVURC and FVL should continue to strengthen collaboration with clinical veterinarians and equine associations to increase training in horses and optimize human resources and hospital facilities.

1.1.2. Insufficient clinical training in porcine

1.1.2.1. Factual information

The Establishment is not compliant with sub-standard 3.5, because of insufficient clinical training in common animal species, especially in porcine.

Clinical Propaedeutic are given only in dogs and cattle and would be beneficial using Faculty owned pigs as well, so the suggestion for improvement was to introduce regular clinical propaedeutic in pigs.

1.1.2.2. Comments

To increase the clinical practice in pigs, two lines of action were implemented:

- Measures aimed at obtaining new animal resources (pigs)
- Modifications in the program of different subjects oriented to increase clinical practice in horses and pigs.

1.1.1.2.a. Measures aimed at obtaining new animal resources:

- A New Swine Experimental Teaching Farm was designed and projected to be built during the 2020/21 academic year, as a result of an agreement between the Provincial Government of Lugo and the USC (see correction of minor deficiency 3 - Substandard 4.7)
- Agreement with the Galician Association of Autochthonous Porcine Breeders (ASOPORCEL) for the use of pig farms for clinical practices meanwhile (Annex 3.5.A).

A more ambitious project for the New Swine Experimental Teaching Farm was approved with the following units:

- A semen bank,
- A gestation module for 30 sows,
- A breeding module for piglets destined to farm re-population,
- A breeding module for pregnant sows,
- Several pens for extensive breeding,
- Facilities for teaching: teaching room, offices, dressing rooms, etc.

Until the new farm is built, practicals are performed at farms with extensive breeding of Galician pigs (new agreements as Annex...).

1.1.1.2.b. Modifications in the program of different subjects oriented to increase clinical practice in pigs:

A New Swine Experimental Teaching Farm was designed and projected to be built during the 2020/21 academic year, as a result of an agreement between the Provincial Government of Lugo and the USC

Several modifications in the program of different subjects were approved to increase clinical practice in pigs that will be carried out at the facilities of this new pig farm.

During the time that the new farm is not yet built, porcine practices will be carried out in private pig farms under the agreement signed with the Galician Association of Autochthonous Porcine Breeders (ASOPORCEL).

The core subject **Veterinary Reproduction and Obstetrics I** has designed a 4 hours practice focused on the reproductive program of a closed-cycle porcine farm. In coordination with the farm's reproductive management program, the most frequent procedures will be performed:

- Semen extraction
- On-site assessment of seminal quality and fertility of the boar
- Preparation of refrigerated seminal doses
- Insemination of sows
- Diagnosis of pregnancy, assessment of conception rate, embryonic mortality, abortions
- Attention to scheduled deliveries
- Evaluation of reproductive capacity and postpartum pathology.

During the academic years 2019-20 and 2020-21 the subject has been looking for new agreements with pig farms. Practicals were not allowed from the beginning of the pandemic. To compensate, videos were recorded in some farms and used during lectures, and posted in the virtual USC, on artificial insemination and ultrasound technique. For the second semester of the academic year 2020-21 new videos on semen extraction and seminal dose preparation will be recorded.

The core subject **Infectious Diseases I** has designed a practice session, lasting 4 hours and focused on the sanitary program of a closed-cycle porcine farm. In this practice, in coordination with the sanitary and health program of the farm, the most frequent procedures will be carried out:

- Sanitary assessment of the herd accordingly to laboratory results, clinical symptoms and productive indicators
- Collection of serum samples to monitor the health program (Aujeszky's disease, African swine fever, classical swine fever, brucellosis and PRRS)
- Stool sampling for parasitological study
- Sampling of hair and ear cartilage
- Vaccination of Aujeszky's disease
- Deworming.
- Piglet electronic identification with ear tags
- Filling of the different holding's records: visit registry, vaccination and deworming in treatments book, etc.

In addition to the future use of the Porcine Teaching Farm, the subject **Infectious Diseases I** has been carrying out a 4-hour practice for several years, to visit different integrated porcine farms. This activity will be maintained to complement the training of students in this species. In each session the students:

- Conduct an epidemiological survey of the veterinary management on productive and health parameters, implemented health programs, more frequent infectious diseases, established biosecurity measures, etc.
- Review the facilities to assess the adequacy of their design, environmental controls, animal housing and breeding, etc.
- Prepare a report indicating:
 - The present risk factors for the introduction and/or dissemination of infectious agents responsible for the outbreak of diseases in recent months, and others with high risk but still not present at the time of the visit

- Corrective measures that should be put into practice to avoid or minimize the risk factors detected by means of changes in relation to treatments, prophylactic measures, herd management, minor modifications to the facilities, etc.

In the second semester of the academic year 2019-20 (scenario 3, confinement period) this 4-hour practical was compensated by a virtual visit to a farm where students worked on the evaluation of the facilities, quality of the health programme applied, and risk factors for infectious diseases outbreaks. Other videos on how to evaluate symptoms and sampling for diagnose were used too. Finally, students performed a test.

Moreover, a qualified swine's veterinarian taught via streaming a 2-hours seminar on biosecurity at pig farms.

In the second semester of the academic year 2020-21 we expect to teach the practical normally since the place is an extensive breeding farm that may ensure the safe distance and protocols.

The core subject **Animal Production II** performs a 5.20-hour porcine hands-on session that includes:

- Recognition and use of livestock equipment and tools.
- Planimetry and dimensioning of the farm.
- Valuation of productive indexes.
- General planning and organization of the productive system:
 - Herd health management, including feeding; health and prophylaxis programs, etc.
 - Biosecurity measures
 - Methods to assess and keep animal welfare
 - Reporting.

In the academic year 2019-20 this practical was carried out as programmed for 9 out of the 12 groups of students until de confinement, and the remaining 3 groups developed practicals with a virtual video-visit to the farm, tutorials and preparation of a report.

In the academic year 2020-21 it will be carried out in a pig farm member of ASOPORCEL.

During the **Hospital Rotation** students will have the opportunity of performing surgery on pigs (castrations, inguinal hernias...) in the new Swine Experimental Teaching Farm. Until the construction of the new farm is finished, HVURC has signed an agreement with the Galician Association of Autochthonous Porcine Breeders (ASOPORCEL) to use their farms to accomplish these practical activities (Annex 3.5.A).

The USC and FVL will enhance a more active participation (not just teaching) of the teaching staff of the integral management of the new swine farm: collaboration in the design of the facilities, animal welfare, as well as design and control of the nutrition plans, production, reproduction and health. This implication will allow students to obtain a more complete practical training, especially in the different aspects of herd management.

Several meetings took place between ASOPORCEL, the Provincial Government of Lugo, and the USC (Vice-rectorate of Lugo's Campus), with the participation of several teachers from the Veterinary Faculty to evaluate the project and it's fit for purpose in teaching.

1.1.3. Insufficient clinical training in porcine food safety and quality

1.1.3.1. Factual information

In the ECOVE report, it was emphasized that Food Safety and Quality was focused on cattle and was observed the absence of visits to pig slaughterhouse, and that teaching in the “from farm to fork” porcine value chain needs to be improved.

1.1.3.2. Comments

This deficiency has been corrected by examining a significant number of pig carcasses and viscera from slaughterhouse (in 3th year) which are completed with visits to pig slaughterhouses during the 5th year.

The core subject **Food Hygiene III**, in order to overcome the part of the major deficiency regarding insufficient training on porcine food safety and quality, has modified the practical program on inspection of meat and meat products to add an active visit to the biggest porcine slaughterhouse in Galicia (Frigolouro). Hence, undergraduate students will be introduced to the hygienic procedures for carcass production in swine, as well as ante mortem and post-mortem inspection and quartering room inspection. These visits already started in December 2018.

In the first semester of the academic year 2019-20, from September to December 2019 students carried out the following practicals:

- 4 visits per student to a beef slaughterhouse (Novafrigsa, Lugo), to learn about ante mortem inspection, rest and welfare of animals, bleeding and stunning of cattle, postmortem slaughter of cows and calves, postmortem inspection of bovine offal and carcasses, sampling for microbiological controls of carcasses, slaughterhouse and cutting room tools, sampling for the determination of drug residues in meat. Practical included evaluation of the students.
- Microbiological and residue determinations carried out at the faculty's Hygiene III laboratory
- 1 visit to a poultry slaughterhouse (Coren group, Orense).
- 2 visits to a pig slaughterhouse (FRIGOLOURO, Porriño). The size of the group was 40 students in every visit, split into four groups of 10 students each, visiting different places in turns with a teacher and a staff from the slaughterhouse (official meat inspector or others). Students learnt on handling of the live animals on the spot, wet area, Gas stunning and electroshock stunning devices, verification of the stunning status, bleeding operations, scalding, depilation, evisceration, separation of viscera, control of the traceability of separated viscera, postmortem inspection of viscera and carcasses, trichoscopic sampling and diagnose, commercial classification of the carcasses, and pig cutting for national and international sales and main differences and requirements depending on the destination.

In the first semester of the academic year 2020-21 (scenario 2, adapted normality) it was not yet allowed to visit any slaughterhouse; students were trained on:

- Audit of a virtual cattle slaughterhouse by using an application of the University of Edinburgh, where the students are asked to discover various hygiene and/or inspection failures during a virtual visit.
- Sampling and microbiological analysis of carcasses and tools. Surface sampling of pig carcasses was carried out at the faculty's Hygiene III laboratory; knives and teflon plates were also sampled too to assess the hygiene of this surfaces; and antibiotic screening test of the 3 plates using kidney samples.

- Postmortem inspection of slaughtered cattle at different ages; purchased offal of cattle, heads and thoracic viscera were used at the faculty's Hygiene III laboratory. The inspection of these offal was made according to the risk analysis based on 627/2019 Regulation. Various graphics and video clips have been used in lectures and posted in the virtual campus, relating to the slaughter and post-mortem inspection of cattle, especially concerning carcasses.
- Post-mortem inspection of pigs: Heads and thoracic viscera (heart, lungs), mediastinum and abdominal viscera (liver, kidneys) were purchased to train students on additional cuts and palpation, and risk analysis.
- Video clips and video from the Ministry of Health on postmortem inspection in cattle, and pig sacrifice and postmortem inspection.
- A home-made video of a small pig slaughterhouse virtual visit and links to a large pig slaughterhouse visit, to assess the differences and evaluate them with respect to the previous regulations.

It is important to point out that in both core subjects **Special Veterinary Anatomical Pathology I and II** students perform a sufficient number of porcine necropsies (See SER FVL 2018 - p. 49 table 5.1.6.). Every Wednesday the Faculty vehicle picks up 3-4 pigs that spontaneously died on a weaning farm. All undergraduates perform a minimal number of 2 complete necropsies in pigs (6 hours of hands-on practice) and write the necropsy report, students also visualize the findings of another 4 necropsies in pigs performed by their classmates.

Update of the number of cadavers necropsied by the students in the core subjects Special Veterinary Pathology I and II (3rd year)			
YEAR	PORCINE	EQUINES	RUMINANTS (cattle, sheep, goats)
2018	138	2	83 (49+28+16)
2019	97	13	71 (54+11+6)
2020*	43	6	46 (40+2+4)

* In the second semester of the academic year 2019-2020, practicals were cancelled by confinement and closure of the Faculty; all cadavers were used only in the 5th semester (**Special Veterinary Pathology I**) of the academic year 2020-21. To compensate, students realised virtual necropsies and wrote necropsy reports on real cases. Students of **Special Veterinary Pathology II** were offered to recuperate, on a voluntary basis, the necropsies in September 2020.

The **core subject Special Veterinary Anatomical Pathology II** include 1-hour lecture on Pathology of slaughtered pigs and evaluate students' knowledge on the pathogenesis and gross lesions found in pigs to apply an evidence-based technical decision on meat inspection at the slaughterhouse, with special reference to application of new Regulation 627/2019.

From the academic year 2019-20 to date, the 1-hour lecture of pathology in slaughtered pigs was integrated with other species in a total of 7-hours lectures adapted to the application of the new Commission Implementing Regulation (EU) 2019/627.

With the new experimental pig farm (production), the training in porcine necropsies and more exposition on porcine food safety and quality, the student will have a more complete vision of the veterinarian's responsibility in the concept "from farm to fork".

1.1.4. Increase the duration (ECTS) of clinical rotations for all animals significantly

1.1.4.1. Factual information

The final report as issued by ECOVE describe that the programme of the clinical rotations includes a high number of learning outcomes, which are described as to complement the academic training. At least 62 clinical tasks have to be performed and assessed for each student. An emergency service is offered for all species, and students have to perform night duties also during these two weeks. This seems to be too short a period and very demanding to complete all tasks and to gain sufficient training and experience in all species and disciplines (3.5.2.2. Comments). So, the suggestion for improvement was *increase the duration (ECTS) of clinical rotations for small animals, equine and farm animals significantly*.

Before explaining the adopted measures, it is necessary to clarify a misconception about Clinical Rotations in the curriculum of the FVL. Clinical Rotations in FVL are not only performed during the Hospital Rotation, but throughout the entire curriculum. The overall clinical training carried out throughout the curriculum (675 hours) is substantial as shown in Sub-standard 3.5 - SER FVL 2018 (pp.21-23, Tables 3.5.1 and 3.5.2). The design of the curriculum in the FVL establishes that students must initiate compulsory clinical practices in the second year (6 hours). In subsequent academic years, they already have full integration into the clinical hospital and extramural activities when enrolled in a great number of compulsory subjects (195.5 hours in the third year, 107 hours in the fourth year and 366.5 hours in the fifth year). Thus, the Hospital Rotation at the end of the curriculum should be considered as the culmination of a series of hospital clinical practices carried out throughout the entire curriculum. The Hospital Rotation is therefore designed to complement the students' clinical training and to assess day one competences related to clinical practice.

1.1.4.2. Comments

The Hospital Rotation will be increased from 5 to 7 ECTS, starting next 2020-2021 academic year; before its complete execution, a transition period is carried out during the present 2019-2020 academic year. This modification of the curriculum has been approved by the Faculty Council (May 14, 2019) and USC Government Board (July 18, 2019). With this project fully implemented, Clinical Training hours during Hospital Rotation will increase from 79 to 150 hours per student.

In addition, the clinical training activities of the Hospital Rotation were revised and more focused towards practical clinical learning. The concept aims for a significant intensification of clinical teaching: full integration of students into everyday clinical routine during the clinical rotations, participation of students in weekend shifts and intensive use of the Clinical Skills Lab.

During this 2019-2020 academic year (a transition period) the student's clinical activity is expanded 79 hours to 110 hours, by extending the schedule of activity during the afternoons:

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
8:30-15:00	SURGERY		INTERNAL MEDICINE		DIAGNOSTIC IMAGING		EQUINE & FARM ANIMALS		NECROPSY & CYTOLOGICAL DIAGNOSIS	
16:00-19:00		a	b	c		d	e		f	OSCE EXAM

Hospital Rotation Activity/Student, Academic year 2019-2020 (2 weeks). Plus 24 hours on duty during weekends

During this transition period the Hospital Rotation has changed in the following aspects:

- The logbook objectives have been modified, and students' evaluation will be performed by score rubrics.
- The assessment of the Hospital Rotation will be done through the osce system
- Active participation of undergraduate students in the full investigation and follow-up of patients are promoted and assessed.
- Following mornings schedule, students on Hospital Rotation accompany a teacher during the daily clinical activity, so that they integrate into the different clinical services and have the possibility to follow-up the clinical cases: by accompanying the patient in all complementary tests, participating in the decision-making and administration of medical-surgical treatments.
- The new software for the digital management of clinical records at the Hospital (His-Vet) allows the student a greater and better tracking of clinical cases (see correction of minor deficiencies 5 and 6 - Substandard 5.2 and 5.5).
- During afternoons, students perform different workshops:
 - a. Fluid therapy in large and small patients
 - b. Surgical sutures in ruminants -advanced-
 - c. Radiology in small animals
 - d. Horse lameness diagnosis with real cases
 - e. Advanced traumatology with animal simulator
 - f. Patient follow-up
- Until the construction of the new Swine Experimental Teaching Farm is finished, an agreement has been reached with the Galician Association of Autochthonous Porcine Breeders (ASOPORCEL) for the realization of practical activities. During this period, HVURC mobile clinic provides clinical support and students will have the opportunity of performing surgery on pigs (castrations, inguinal hernias).
- The Hospital Rotation is carried out all the year round (including the months of June, July and August), thus reducing the number of students per group that permits a better quality of teaching.

In the second semester of the academic year 2019-20 (scenario 3, confinement period), students rotated 1 week of the two, from July to September 2020. Each day students developed, from 8.30 to 9.30AM the exploration, handling, taking of clinical parameters and drug administration to the animals hospitalized in the different services. From 9.30AM to 15.00PM the students integrated in the clinical consultation of Internal Medicine (IM), Surgery and Anaesthesia (S&A), Diagnostic Imaging (DI), Large Animal clinic (LA) and Pathology (P), tutorised by the teachers. Students rotated for 1 day in each one of the clinical Services and participated on a 24-hours emergency service during the weekends.

From 16.00 to 19.00h students attended practical workshops on:

- a. Diagnostic Cytology,
- b. Fluid therapy,
- c. Routes of drug administration in birds (Clinical Skills Lab),
- d. Small animals' radiology,
- e. Diagnose of horse lameness,
- f. Advanced traumatology in models (Clinical Skills Lab).

Before finishing the Hospital rotation, students prepared individually (afternoon of day 4, 5 and 6), and present in public, a clinical case to be evaluated by two clinical teachers.

The practical workshops a, b, d, and the presentation and defence of the clinical cases was online.

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
8:30-15.00h	S&A	IM	DI	LA	P	S&A	IM	DI	LA	P
16.00-19.00h	a	b	c				d	e	f	Presentation & defence of the clinical cases

The next 2020-2021 academic year, the Hospital Rotation will increase up to 7 ECTS, and students will perform 3 weeks of rotation in the HVURC:

	Day 1-3		Day 4-6		Day 7-9		Day 10-12		Day 13-15	
8:30-15:00	SURGERY		INTERNAL MEDICINE		DIAGNOSTIC IMAGING		EQUINE & FARM ANIMALS		NECROPSY & CYTOLOGICAL DIAGNOSIS	
16:00-19:00	a	b	c		d	e		f	OSCE EXAM	

Hospital Rotation Activity /Student, Academic year 2020-2021 (3 weeks). Plus 24 hours on duty during weekends

The extension of the Hospital Rotation includes a series of improvements that will provide further intensification of clinical teaching in the same aspects already mentioned for the present 2019-2020 transition period: full integration of students into everyday clinical routine during the clinical rotations, participation of students in weekend shifts, and intensive use of the skills lab:

- Students will increase hands on clinical training from 110 to 151.5 hours
- Students will rotate 3 days in each service
- During the afternoons, they will hold the following workshops:
 - a. Advanced and emergency surgery on dog corpses
 - b. Fluid therapy in large and small patients
 - c. Radiology in small animals

- d. Ultrasound in small animals
- e. Horse lameness diagnosis with real cases
- f. Advanced traumatology with animal simulator
- g. Surgical sutures in ruminants -advanced-
- h. Ultrasound and radiology in equine and cattle
- i. Development of a herd health program for horses by visiting equine farms.

The initiative promoted by the Deans of Veterinary Faculties in Spain to request an official extension of the veterinary curriculum to 330 ECTS should remain active as it would allow to extend the duration and quality of the Hospital Rotation.

In the academic year 2020-21 (scenario 2, adapted normality) students rotate 1 week for the different Services since still apply half reduction of the size of the groups, and the time for practicals, compensating the rest of hours with online activities.

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
8:30-15.00h	S&A	IM	DI	LA	P a
16.00-19.00h	b	c	d	e	Presentation & defence of the clinical cases

Unfortunately, a transient problem on the compatibility of the new contracts with the USC of the veterinarians working at the VTH Rof Codina (1) prevented the rotation of student in Diagnostic Imaging and Equine Service. Supplementary material has been uploaded to the virtual USC to compensate this situation. In the second semester this problem will be solved.

(1) From January 2019 to January 2021, 5 veterinarians working at the VTH Rof Codina resigned of their previous contract with the USC to apply to a new contract as associate professor, with increased number of teaching hours (and salary), to face the increase in the number of credits of the Hospital Rotation of students. Unfortunately, the Galician government did not approve the compatibility of the contract as veterinarians at the VTH Rof Codina with the new contract as associate professor. It took a long time to get the exceptional consideration by the Galician government of such a double hat for the 5 veterinarians. Now the new contracts had been announced and applications are pendant of evaluation by a Committee in early February. In December 2020, the Department of Anatomy, Animal Production and Veterinary Clinical Sciences asked for 4 new contracts for clinical subjects.

1.1.5. Finalize the new dairy farm and optimize its use to improve the teaching of Herd Health Management

1.1.5.1. Factual information

During the last visit of EAEVE (in September 2018) the teaching farm was budgeted, the project designed, but the works had barely begun.

So, in ECOVE Report the suggestions for improvement was that the new dairy farm should be finished as a matter of urgency to optimise/maximise its use in teaching using not just the animals, but also the production, health, nutrition and other data it can generate to promote Herd Health Management teaching.

1.1.5.2. Comments

The buildings of the farm have already been completed and are expected to be fully functional in the second semester of this 2019-20 course. FVL has already scheduled practical clinical and Herd Health Management activities to be done in the new teaching farm for the second semester 2019-20 (see Annex 3.5.B).

Because of the Covid-19 situation, the inauguration of the new dairy farm (CAMPUS TERRA Farm) was delayed until 15 December 2020; before this date, practicals were performed in the old teaching farm and other external dairy farms.

In December 2020, some subjects already started the practicals in the new dairy farm: **Epidemiology, Preventive Medicine and Sanitary Policy II, and Obstetrics and Reproduction II.**

In the second semester of the academic year 2020-21, all practicals will be organised in the new dairy farm (CAMPUS TERRA Farm) as is written in the RVSER.

Several modifications have been promoted in the curricula of various subjects to increase the teaching activities to be developed in this new dairy farm:

Students of the core subject **Clinical Propaedeutics** will go to the farm to carry out a field practice, once they have completed all the clinical sessions on the individualized animal and under controlled conditions. In this way, we can be sure that students properly put into practice the corresponding skills and get confident enough to apply them in a livestock farm.

Clinical Propaedeutics increased the practicals per student from 35 to 37 hours and proposed a 4-hours practical at the new dairy farm. Because of the delay in the opening of the new farm, practicals on clinical exploration and record were performed on the VTH Rof Codina cattle. In the following academic year this practical will be performed at the new dairy teaching farm.

The **HVURC mobile clinic** service will be responsible for the on-site clinical care of dairy cattle at the farm.

The core subjects **Veterinary Reproduction and Obstetrics II** and **Animal Reproduction Technology** will carry out the following coordinated practical activity:

- Reproductive disorders (4 hours)
 - Applicable diagnostic procedures
 - Discussion of cases and treatment possibilities
- Reproductive control program in a cattle farm (4 hours)
 - Selection criteria for choosing animals to evaluate
 - Pregnancy diagnosis
 - Postpartum evaluation
 - Application of protocols for the control of the oestrous cycle
 - Evaluation of reproductive status.

In the second semester of the academic year 2019-20 (scenario 3, confinement period), the 4-hour practical on Reproductive disorders was substituted by online work of students on ultrasound images of different reproductive pathologies, to reach a diagnosis.

In the second semester of the academic year 2020-21 this practical will be taught at the new dairy farm.

The practical on Reproductive control in cattle farm took place for the first time in the new dairy farm (CAMPUS TERRA Farm) in December 2020 and will continue this way, once a week, in the future courses.

The core subject **Animal Production I** included a 5.20-hour practice session in which students assess the characteristics of the farm in relation to milk production: evaluation of productive indices, general planning and organization of the productive system and the suitability of the facilities.

Practicals were developed as programmed but in the old dairy farm.

The core subject of **Animal Husbandry and Health** introduced a new practice lasting 4 hours in which students analyse the animal performance data, the morphological scores and qualifications, and the genetic values.

In the second semester of the academic year 2019-20 (scenario 3, confinement period), this 4-hour practical was substituted by videos, schemes, and online practical exercise.

In the second semester of the academic year 2020-21, it will take place, as expected, in the new dairy farm.

The core subject **Animal Nutrition and Feeding** introduced a new practice of 4 hours that involves reviewing the different factors that may influence the suitability of the daily ration.

In the second semester of the academic year 2019-20 (scenario 3, confinement period), this 4-hour practical was substituted by an online interactive session on feed control, with practical examples, and evaluation of composition of diets.

In the second semester of the academic year 2020-21, it will take place, as expected, in the new dairy farm.

The subjects included in the **area of Animal Health** have developed a coordinated programming of a total of 38.5 hours of clinical practices will take place in the teaching farm. All are coordinated activities related to Herd health management of cattle. The detailed activities designed by the different subjects are:

- **Infectious diseases II** (3.5 hours): sampling and evaluation of data on infectious diseases included in the program of health defence groups.
- **Infectious diseases II** (3 hours): sample and evaluation of dairy control data in bovine mastitis.

In the academic year 2019-20 practicals of **Infectious diseases II** were carried out as programmed, in the first semester.

In the academic year 2020-21 because of the restrictions to visit external farms, these practicals were compensated by virtual visits to farms, practical cases, and interpretation of serum profiles. In the future they will take place, as expected, in the new dairy farm.

- **Parasitic diseases I** (5 hours): program to control digestive parasites in cattle

In the second semester of the academic year 2019-20, 3 hours out of the 5-hours practical were carried out as programmed at the VTH Rof Codina; after the confinement, practical activities were substituted by videos and online practical sessions.

In the second semester of the academic year 2020-21, it will take place, as expected, in the new dairy farm.

- **Parasitic diseases II** (5 hours): neospora and ectoparasite control program in cattle
- **Parasitic diseases II** (4 hours): deworming program in cattle

In the first semester of the academic years 2019-20 and 2020-21 practicals of **Parasitic diseases II** were carried out as programmed at the VTH Rof Codina.

- **Preventive medicine II** (4 hours): review of preventive medicine measures
- **Preventive medicine II** (4 hours): vaccination program and health policy

Practicals on review of preventive medicine measures were carried out, as programmed in external farms during the academic year 2019-20, before the confinement. Practical on vaccination program and health policy started in the academic year 2020-21 and were carried out in external farms. From December 2020, both practicals were developed at the new dairy farm.

- **Zoonosis and Public Health** (4 hours): identification of possible zoonosis vectors

In the second semester of the academic year 2019-20 (scenario 3, confinement period), half of the practicals on surveillance of zoonosis vectors were interrupted and substituted by online training on:

- How to prepare home-made CO₂ traps to catch mosquitoes and appropriate placing to this purpose,
- Dipping technique to catch mosquito larvae and ideal places for finding Culicid larvae, and pupae,
- How to catch ticks with a white cloth.

Students were encouraged to upload their photos on the captures in the virtual campus, and to differentiate the vectors of zoonosis from other harmless arthropods by the application of identification algorithms.

In the academic year 2020-21 it will be developed at the new dairy farm, and the identified vectors will be related to climatic conditions, soil, forest, altitude, and agricultural and forestry activities.

- **Preventive Medicine I** (6 hours): obtaining data on farm animals and their use as disease indicators.

In the second semester of the academic year 2019-20 (scenario 3, confinement period), these practicals were substituted by virtual problem-solving sessions using the case method.

In the second semester of the academic year 2020-21 (scenario 2, adapted normality), these practicals will take place in the new dairy farm.

The USC and FVL will enhance a more active participation (not just teaching) of the teaching staff of the integral management of the farm: collaboration in the design of the facilities, animal welfare, as well as design and control of the nutrition plans, production, reproduction and health. This implication will allow students to obtain a more complete practical training, especially in the different aspects of herd management.

2. Correction of the Minor Deficiencies

2.1. Minor deficiency 1: sub-standard 2.5, partial compliance with sub-standard 2.5, because of insufficient autonomy of the Establishment for departmental restructuring and staff recruitment

EXTRACT FROM THE FINAL REPORT AS ISSUED BY ECOVE ON 22 November 2018, page 13.

2.5.2. Comments

Together, the departmental structure and the centralized and rigid financial model challenge the autonomy of the Establishment to a substantial degree. The Establishment itself is not able to allocate resources (personnel and/or running costs) from one subject of the curriculum to another if they find that the balance between two subjects is no longer appropriate. For example, FVL cannot, if they wanted to, allocate resources from Food Technology to Equine Clinical Sciences if they thought this to be a strategically robust decision.

2.5.3. Suggestions for improvement

It is strongly recommended that the departmental structure of the FVL is changed, so that the Establishment itself will host the teaching activities associated with the veterinary programme and that the absolute majority of the academic and support staff that today are organized under departments outside FVL should be FVL employees. This would greatly increase the autonomy and flexibility of the Establishment

2.5.4. Decision

The Establishment is partially compliant with sub-standard 2.5, because of insufficient autonomy of the Establishment for departmental restructuring and staff recruitment

2.1.1. Factual information

For their finances and teaching organization, public universities in Spain are governed by strict national regulations, which are mandatory. This affects the organization of the academic staff under the coordination of the departments and the recruitment of the support staff through the central organs of the universities

2.1.2. Comments

As explained in SER FVL 2018, sub-standard 9.2, the Spanish University System has its own teaching organization, where the Departments assume the responsibility for the teaching activity of the Academic Staff. However, Establishments maintain absolute control over the implementation, development and evolution of their own curricula. Indeed, FVL has designed its own curriculum, according to the European, National and Regional regulations, and is required by law to perform a yearly evaluation (annual Monitoring Report of the degree) to ensure that the objectives are met and to guarantee that resources are adequate and sufficient.

The Faculty organizes the Veterinary curriculum and entrusts the teaching of the different subjects to the Departments, according to their specialization (the so-called: knowledge areas).

The Faculty Council of the FVL annually reviews the teaching needs of all subjects according to the curriculum and number of students ([link to website html](#)). Once the teaching necessities has been established, the Departments organize the teaching dedication of their Academic Staff (POD), with sufficient autonomy to allocate personnel from one subject of the curriculum to another if they find that the balance between subjects is no longer appropriate. In this way, potential need for academic

staff is determined by the Departments themselves in accordance with the curriculum and under the supervision of the FVL.

It should be borne in mind that the two main veterinary Departments covering the knowledge areas of Clinical Sciences, Animal Production, Herd Health Management, and many of the basic sciences (Anatomy, Histology and Embryology, Pathology, Parasitology, Epidemiology, Welfare and Nutrition), as well as the Hospital Rotation, are located at the FVL. They actively participate in the Faculty Council (all departments and HVURC have representatives in this major decision body).

The Faculty also supervises undergraduate teaching and implements the Quality Assessment Procedures through the introduction of the end-of-semester follow-up reviews of the syllabi by the GTCS (see SER FVL 2018 sub-standard 3.1), and the annual Monitoring Report of the degree and its associated improvement actions (described in SER FVL 2018 sub-standard 11.1).

Regarding the Support Staff, their recruitment depends entirely on the USC Government Board based on the needs of each Faculty and Department; current criteria for determining the needs for support staff are the number of degrees offered by each Establishment, the number of students enrolled, the number of teachers, and the annual budget managed. This system allows to satisfy the needs of the different Establishments of the university in an equitable way, accordingly to its economic capacities. In addition, when a specific need about Support Staff is detected, the Dean rises the corresponding request to the USC Government Board.

HVURC, as a Foundation, has an independent financing process with great support from public institutions that guarantees its proper functioning. This institution has the capacity to contract clinical, support and administrative staff which are paid out by its own budget.

2.1.3. Suggestions of improvement

The suggestion made by the ECOVE on the greater autonomy of the Establishment on the departmental restructuring and the recruitment of staff, has been presented to the central organism of the University to raise awareness about the special needs of veterinary teaching. The intention was to emphasize the need to act with agility and efficiency to the requirements of our faculty, but knowing the limitations of the framework of Spanish university legislation.

2.2. Minor deficiency 2: sub-standard 3.5, because of insufficient training in functional sciences

EXTRACT FROM THE FINAL REPORT AS ISSUED BY ECOVE ON 22 November 2018, page 13.

3.5.1.2. Comments

The distribution of theoretical and practical training hours in basic subjects is not well-balanced. The different availability of teachers in the individual disciplines may have partly caused this distribution. The teaching of Veterinary Physiology, in terms of theoretical and practical hours provided, appears to be insufficient and dramatically fewer when compared to Anatomy subjects. The veterinary functional science should be more integrated with morphological science in domestic animals.

3.5.1.3. Suggestions for improvement

A more balanced distribution of theoretical lectures between veterinary anatomy, physiology and biochemistry is suggested. Practical activity must be strengthened and better distributed; the possibility for better communication between the veterinary anatomy, veterinary physiology and veterinary pathology units should be investigated to increase the amount of practical teaching in both non-clinical and clinical animals.

3.5.6. Decision

The Establishment is partially compliant with sub-standard 3.5, because of insufficient training in functional sciences

2.2.1. Factual information

The Final Report issued by the ECOVE signals an insufficient training in functional sciences.

2.2.2. Comments

The detected deficiency has been corrected as follows:

- To improve the balance between Anatomy, Biochemistry and Physiology subjects, the theoretical lectures of Veterinary Physiology have been extended from 48 to 68 hours. This is the maximum possible increase allowed by the structure of the curriculum and supposes an addition of more than 40%. The number of theoretical hours of these disciplines is now reasonably balanced:
 - **Veterinary Anatomy I and II:** 74 hours of lecturing (6 + 6 ECTS)
 - **Veterinary Physiology I and II:** 68 hours of lecturing (6 + 6 ECTS)
 - **Biochemistry and Integration of Metabolism:** 60 hours of lecturing (6 + 3 ECTS)

With respect to the total hours devoted to the “functional sciences” (Veterinary Physiology I and II, Biochemistry, Integration of Metabolism, Veterinary Immunology and Animal Ethology) in relation to the “morphological sciences” (Veterinary Anatomy I and II, Veterinary Cytology and Histology and Veterinary Embryology) there is a positive deviation toward the functional sciences: 333 hours vs 299.5 hours (See SER FVL 2018 - Annex 3.5.1 Curriculum hours in EU-listed subjects taken by each student).

- The practical sessions of Veterinary Physiology II have incorporated a new module made in a HVURC laboratory, in which students perform routine blood and urine analysis of hospital patients. It should be added that the curriculum includes other subjects whose practical programmes has contents related and complementary to those of Physiology, and all are inter-coordinated. Among them, it is worth mentioning the practice of diagnostic cytology, included in Veterinary Cytology and Histology, or the execution and interpretation of a proteinogram and measurement of serum glucose levels of HVURC animals in Metabolism Integration.

- The Clinical Skills Lab has included an electrocardiography station to reinforce the practical self-learning of students in General Pathology, which is useful to review the concepts of cardiac physiology.

The regular meetings of the GTCS (Semester Coordination Working Group), that are hold twice a year, guarantee the coordination between the subjects in a horizontal way. Reporting their results to the Quality Committee assures the vertical coordination in the whole curriculum.

In the first semester of the academic year 2019-20 (scenario 1, normality) the new practicals of **Physiology II** in the VTH Rof Codina laboratory were carried out as programmed.

In the first semester of the academic year 2020-21 (scenario 2, adapted normality) this practical was substituted by virtual activities.

Since there is half reduction of the size of the groups and the time for practicals, the practicals in **Cytology and Histology** and **Integration of metabolism** have been done at the laboratory (experimental part) and virtually (interpretation of results and reporting).

There is an electrocardiography station available at the VTH Rof Codina for practicals, but it is necessary to complement it with a mannequin and a cardiac electrical impulse simulator.

2.2.3. Suggestions of improvement

The coordination mechanisms must continue as they are a system that has proved useful to avoid redundancies and overlaps between subjects.

The initiative promoted by the Deans of Veterinary Faculties in Spain to request an official expansion to 330 ECTS of the veterinary curriculum, should remain active as it will allow greater harmonisation with degrees from other European countries. If this endeavour is successful, the committee in charge of drafting the new curriculum should consider comments and suggestions from external stakeholders (social, economic and professional sectors related to veterinary fields).

2.3. Minor deficiency 3: sub-standard 4.7, because of insufficient housing and examination facilities for horses and pigs and the new farm not yet being built and fully functional

EXTRACT FROM THE FINAL REPORT AS ISSUED BY ECOVE ON 22 NOVEMBER 2018, page 21.

4.7.2. Comments

The housing for small animals is modern and adequate. Large animal stables are in the CEBIOVET building. Due to the separation of the research section from the HVURC, only one stable is used together for horses and cattle, including a separated space for the examination of horses. No other standard examination rooms for horses and cows separately with suitable floor and equipment are available.

The Establishment's current cattle teaching farm facilities are inadequate. The farm no longer provides fit for purpose animal housing, handling and teaching facilities and equipment. The facilities do not promote best husbandry, welfare and management practices or ensure relevant biosecurity and bio-containment.

4.7.3. Suggestions for improvement

Adequate examination rooms with space for restrained as well as unrestrained horses should be available.

The Establishment is to be congratulated on the advanced plans to replace the farm.

4.7.4. Decision

The Establishment is partially compliant with sub-standard 4.7, because of insufficient housing and examination facilities for horses and pigs and the new farm not yet being built and fully functional.

2.3.1. Factual information

The Final Report issued by the ECOVE signals an insufficient housing and examination facilities for horses and pigs, and the new farm not yet being built and fully functional.

2.3.2. Comments

In order to remedy the deficiencies identified, work is being done on different fronts:

- In relation to equine teaching activities: The HVURC has improved the housing, exploration and hospitalization facilities for horses, with the following enhancements (module 5 in Annex 4.7.A):

- New access door to the horse boxes, to separate females from males
- New separate housing facilities for horses that include:
 - 8 new boxes for horses
 - 2 new exploration rooms for horses with equine stocks
 - Offices and on-duty facilities for equine practitioners to achieve better control and attention to hospitalized horses

- In relation to new *Gayoso Castro* farm installations, the facilities for porcine and bovine teaching are described separately:

- A new Swine Experimental Teaching Farm was designed and projected to be built during the 2020/21 course, as a result of an agreement between the Provincial Government of Lugo, the USC and the Galician Association of Autochthonous Porcine Breeders (ASOPORCEL). The project contemplates the building of a pig unit in semi-extensive production regime with 20 sows and 10 boars, in an area of 2 ha, and includes a covered building for the boars with semen extraction unit, insemination unit, farrowing crate and weaning boxes. The teaching premises contains a small lecture room, laboratory, desk, changing facilities and toilets (see construction plans in Annex 4.7.B). Until this new Swine Experimental Teaching Farm is not operational, these teaching activities will be carried out on several private farms agreed by the porcine breeders' association ASOPORCEL (Annex 3.5.A).
- New Experimental Teaching Dairy Farm: The building was completed in October 2019, and will start to be functional in early 2020; we expect them to be ready to be used for practical sessions during the second semester of the 2019-20 academic course. Therefore, the necessary actions on our side have already been taken and the subjects involved have already updated the programmes of their practical activities (see Annex 3.5.B). The farm includes advanced technologies and the strictest bio-security codes and animal welfare standards.

Because of the Covid-19 situation, the inauguration of the new dairy farm (CAMPUS TERRA Farm) was delayed until 15 December 2020; before this date, practicals were performed in the old teaching farm and other external dairy farms.

In December 2020, some subjects of the first semester already started the practicals in the new dairy farm: **Epidemiology, Preventive Medicine and Sanitary Policy II, and Obstetrics and Reproduction II.**

In the second semester of the academic year 2020-21, all practicals will be organised in the new dairy farm (CAMPUS TERRA Farm) as is written in the RVSER.

It occupies a 30-ha property and has 3 buildings (see building plans in Annex 4.7.C):

- The barn for dairy cattle has a surface of 2,428 m². It has a room for 70 cows in production, an additional area for 17 cows in dry period, another area for the stallion and a space of 127 m² for calves. It is equipped with automatic milking system, lazaretto, calving rooms, milk storage and cleaning system. There is also an examination room with stock.
- 480 m² machinery warehouse for farm implements, maintenance workshop and washing area.
- 387 m² building for teaching and research activities, with two classrooms for 20 people each and a laboratory with same capacity. There is also a work and desk room and toilets and changing rooms (male and female) for 20 people.
- Attached to the cattle barn, there are 2 silos (560 m³ each) for food, and a slurry pit of 1,050 m³ that meets the requirements of environmental regulations.

2.3.3. Suggestions of improvement

These facilities, which represent a significant improvement for FVL teaching, imply a serious commitment of the agents involved in their management and maintenance that must be monitored ([link to website html](#)).

2.4. Minor deficiency 4: sub-standard 5.1, because of insufficient number of equine necropsies

EXTRACT FROM THE FINAL REPORT AS ISSUED BY ECOVE ON 22 NOVEMBER 2018, page 25.

5.1.2. Comments

The equine cadavers available for the teaching of pathology are insufficient...

5.1.3. Suggestions for improvement

The Establishment must find a way of exposing students to more equine cadavers. Consideration might for example be given to the purchase and euthanasia of horses and ponies or the acquisition of abattoir derived pathological material, as well as offering a free necropsy service to local equine veterinarians.

5.1.4. Decision

The Establishment is partially compliant with sub-standard 5.1, because of insufficient number of equine necropsies.

2.4.1. Factual information

The Final Report issued by the ECOVE signals an insufficient number of equine necropsies.

2.4.2. Comments

To guarantee the correction of this minor deficiency, we have applied two measures:

- Increased clinical equine activity in the HVURC:

- Since 2019, the equine service of the HVURC has increased the number of agreements with the equestrian centres to increase the caseload of horses and rise the number of cadavers available for necropsies (see correction of Minor deficiency 5: sub-standard 5.2). The transportation of cadavers and the necropsy are offered for free to the owners, which favours the increase in the number of necropsies performed by students: 6 equines in the second semester of the 2018-19 academic year, and 4 in the first semester of the 2019-20 academic year (10 necropsies per year).

Update of the number of patients used in practicals with students			
YEAR	EQUINES	PORCINE	RUMINANTS
	Intramural (<i>extramural</i>)	Intramural (<i>extramural</i>)	Bovine + Ovine + Caprine Intramural (<i>extramural</i>)
2018	70 (147)	14 (13)	552+22+14 (502+15+12)
2019	408 (109)	36 (34)	1477+24+13 (1256+16+11)
2020	61 (245)	23 (12)	2119+47+18 (1998+35+12)

As you can see in the table, the number of equine patients, both intramural and extramural, were substantially increased.

Update of the number of cadavers necropsied by the students in the core subjects Special Veterinary Pathology I and II (3rd year)			
YEAR	PORCINE	EQUINES	RUMINANTS (cattle, sheep, goats)
2018	138	2	83 (49+28+16)
2019	97	13	71 (54+11+6)
2020*	43	6	46 (40+2+4)

* In the second semester of the academic year 2019-2020, practicals were cancelled by confinement and closure of the Faculty; all cadavers were used only in the 5th semester (**Special Veterinary Pathology I**) of the academic year 2020-21. To compensate, students realised virtual necropsies and wrote necropsy reports on real cases. Students of **Special Veterinary Pathology II** were offered to recuperate, on a voluntary basis, the necropsies in September 2020.

As you can see in the table, the number of equine necropsies was substantially increased.

- New agreement with the company in charge of the waste management of cadavers in Galicia (GESUGA):

To guarantee, at least, one equine carcass every week for each group of students, the USC has signed an official agreement with the company in charge of the waste management of cadavers in Galicia (GESUGA). We include a copy of the official agreement signed on 7 June 2019 (see Annex 5.1).

The measures implemented assure a constant number of equine specimens for necropsy every academic year.

The agreement with GESUGA is functioning very well, but not all equine cadavers managed by GESUGA are suitable for necropsy since the limit of weight in the necropsy facilities for a safe managing is 370Kg and the cadavers must not be putrid. Considering this factors, approximately 12 cadavers per year fulfil this requirements and are used for necropsies performed by the students.

2.4.3. Suggestions of improvement

FVL and HVURC will continue their above-mentioned efforts to increase numbers of equine necropsies.

2.5. Minor deficiency 5: sub-standard 5.2, because of insufficient caseload of horses and pigs

EXTRACT FROM THE FINAL REPORT AS ISSUED BY ECOVE ON 22 NOVEMBER 2018, page 25.

5.2.2. Comments

The number of cases in general in horses as well as the number of hospitalized patients is concerning. Students need to see more pig cases.

5.2.3. Suggestions for improvement

The Establishment must find a way of exposing students to more equine cases.

...The HVURC caseload is very low with the hospital only working in the mornings. This severely impacts on caseload and thus undergraduate and postgraduate training as well as meaning the facilities are underutilised.”

...A plan needs to be put in place to correct this and better utilise the hospital infrastructure. Dedicated investment, including dedicated staff time, needs to be made into the clinical skills facility. Students need to be exposed to more pig farms and the management of pig diseases.

5.2.4. Decision

The Establishment is partially compliant with sub-standard 5.2, because of insufficient caseload of horses and pigs.

2.5.1. Factual information

Although the number of equine patients seen intra and extra-murally reported in the SER 2018 indicators seem to be over the minimum required, the ECOVE report suggests that the HVURC equine caseload should be improved. Similarly, the ECOVE report requests to increase student exposure to more pig farms and the management of pig diseases.

On the other hand, an increasing investment and more personal involvement in the management of the Clinical Skills lab (LHC) is suggested.

2.5.2. Comments

2.5.2.a. Measures adopted to increase students equine clinical training

In major deficiency of sub-standard 3.5 correction, we have described the measures adopted by FVL to increase students exposure to more equine cases (subjects: Clinical Propaedeutic, Veterinary Diagnostic Imaging, Veterinary Anaesthesia and Reanimation, Clinical Veterinary Medicine and Surgery II, and Infectious Diseases I) and to porcine species (subjects: Veterinary Reproduction and Obstetrics II, Infectious Diseases I and Animal Production II).

In minor deficiency of sub-standard 5.1. correction, we have described the increase of equine necropsies (subjects: Special Veterinary Anatomical Pathology I and II).

In order to increase the clinical caseload in all species (particularly in horses) and expand undergraduate and postgraduate use of the hospital facilities, the HVURC has adopted the following improvements:

- The HVURC has extended its consultation hours from 9 am to 6 pm, in order to favour the increase in caseload and improve undergraduate and postgraduate training.
- New agreements between HVURC and horse breeding farms were signed. These agreements are oriented to provide veterinary attention to these farms, and by this mean increase the caseload of horses and the possibility of interaction for students (see Annex 5.2.A). The result of this action can be already appreciated as a raising in the equine caseload during the first half of 2019 compared to first half of 2017 (see Annex 5.2.B).
- The hospital has launched its own new software for the digital management of clinical records (His-Vet). This software allows a comprehensive management of clinical records, including reports, test results, images, etc. It can be consulted not only on all hospital computers, but also allows the student a remote access to clinical records, thus facilitating them a greater and better tracking of clinical cases.

2.5.2.b. Measures adopted to increase student's exposure to more pig farms and the management of pig diseases.

As was previously explained (see correction of minor deficiency 3 - Substandard 4.7) a new Swine Experimental Teaching Farm was designed and projected, and new agreements with the Galician Association of Autochthonous Porcine Breeders (ASOPORCEL) were signed to recruit more pig farms for clinical practices Annex (3.5.A).

In parallel to these initiatives, several modifications in the programmes of different subjects were approved to increase clinical practice in pigs that will be carried out in these new pig farm facilities (See correction of major deficiency 3.5 - chapter 1.1.2.).

During the Hospital Rotation students will also have the opportunity to perform surgical practices on pigs (castrations, inguinal hernias...) in the new Swine Experimental Teaching Farm and those farms belonging to the porcine association (ASOPORCEL).

2.5.2.c. As regards the economic investment and management of the Clinical Skills Lab (LHC):

- Funds are obtained annually for quality improvements by the Vice-Rectorate for Planning and Strategic Projection, and a part of these grants are destined to collaborate with the subjects for the purchase of material necessary for the operation of the LHC.
- During 2019, FVL has invested a part of its annual budget for the provision of the LHC.

- Real-size resin models of cow and horse for exploration, handling, support, bandaging, nerve blocks, tourniquets, etc.

These models are already in use during the academic year 2020-2021 for practicals of **bandage in Surgery and Anaesthesia I**.

- Workstation with an ultrasound machine to improve the skill in handling the probes, adjusting the settings and interpret eco-images of different tissue textures.

This ultrasound machine workstation is already in use at the **Diagnostic Imaging service of the VTH Rof Codina**.

- ECG simulator for practicing interpretation skills.

The ECG station is already available at the **VTH Rof Codina**, but it requires of a cardiac electrical impulse simulator to be functional.

Funds for the Clinical Skills Lab were used in the purchase of:

- a dog mannequin,
- a dog emergency training model (Critical Care Jerry), to be used in practicals of Anaesthesia, Surgery, Internal Medicine and Hospital Rotation.
- Ophthalmoscope,
- Otoscope,
- Foreign body forceps
- Fluid therapy droppers,
- New chairs,
- A video monitor connected to a computer (to display videos and tutorials),
- Materials for the simulators (latex tubes, foam balls to simulate eyes, syringes, gloves, etc.)
- During 2019, the Ministry of Education of the Autonomous Government of Galicia has contributed with 62,000 € for the acquisition of bovine and equine high-fidelity reproduction simulators (see Annex 5.2.C):
 - Models for palpation of the reproductive system (Bovine and Equine), training of clinical skills in exploration, artificial insemination, pregnancy diagnosis and embryo transfer.
 - Compact dystocia simulator model, for handling bovine deliveries, used to acquire skills in the normal and dystocic delivery of the cow.
 - Bovine theriogenology models (2).

During the first semester of the academic year 2019-20 both simulators were made available for the students in the **Obstetrics and Reproduction laboratory**, upon request, with a manual of use and teacher supervision.

In the academic year 2020-2021, both simulators were used in practicals of **Obstetrics and Reproduction I** in the first semester, to complement the practicals on rectal palpation and Artificial Insemination in uterus from the slaughterhouse.

In the academic year 2020-21 other 2 simulators arrived. One of them was used in the practicals of embryo transfer in the subject **Technology of animal reproduction**. The second one, a dystocia's simulator, will be used in the second semester in practicals of **Obstetrics and Reproduction II**.

- As a part of the LHC, but in a separate location due to the volume of the material employed, **Veterinary Anatomy I** offers an osteology self-learning station in the dissection premises that can be accessed by appointment subject to the availability of staff.
- The academic staff of the subjects involved in the activities carried out in the LCH supervises its operation, under the coordination of the Vice Dean of External Practices.

During the academic year 2020-21, with half reduction of the size of the groups and the time for practicals, the Clinical Skills Lab has proved to be very useful for compensating the rest of hours of training. For instance in Surgery and Anaesthesia I it was used to complement practicals on instruments and preparation of patients, and two new practicals were taught on types and methods of bandage, and advanced sutures, to compensate the lack of 24 hours emergency practicals.

The Faculty is looking for a procedure to make the simulators, and the Clinical Skills Lab available for the students all year round.

2.5.3. Suggestions of improvement

We will continue our above-mentioned efforts to increase the clinical caseload in all species (particularly in horses and pigs). Annually, the LHC should receive an adequate quote for maintenance and updating. FVL will propose to USC the creation of two fellowships for LHC-collaborating students.

2.6. Minor deficiency 6: sub-standard 5.5, because of the structure of the clinical training not allowing the active participation of undergraduate students in the full investigation and follow-up of patients

EXTRACT FROM THE FINAL REPORT AS ISSUED BY ECOVE ON 22 NOVEMBER 2018, page 27.

5.5.2. Comments

The integration of clinical training from an early point in the programme is to be commended and welcomed. However, the 2 weeks of clinical rotations is far too short to allow students to follow cases throughout their clinical work-up or to follow-up cases

5.5.3. Suggestions for improvement

Greatly expand clinical rotations, perhaps considering a 'lecture free' final year. It is recognised that to do this the hospital would need to see cases all day and not just in the mornings, more specialist staff and a greater caseload would be needed.

5.5.4. Decision

The Establishment is partially compliant with sub-standard 5.5, because of the structure of the clinical training not allowing the active participation of undergraduate students in the full investigation and follow-up of patients.

2.6.1. Factual information

The Final Report issued by ECOVE signals that the clinical training does not promote the active participation of undergraduate students in the full investigation and follow-up of patients.

Before commenting on the measures taken to correct this minor deficiency, it is necessary to emphasize again that Clinical Rotations are not only performed during the Hospital Rotation, but

throughout the entire curriculum. Prior to access to the Hospital Rotation students are fully integrated into the in-hospital activity for at least 6 weeks, when performing clinical practices of different compulsory subjects, which include attending on-duty shifts. During these practices, students have the opportunity to accomplish full investigation and follow-up of patients. They also do diagnostic clinical activity in the Pathology Service, and in numerous extramural clinical practices related to Health Herd management (See SER FVL 2018, Sub-standard 3.5).

2.6.2. Comments

The Hospital Rotation at the end of the curriculum should be considered as the culmination of a series of hospital clinical practices carried out during the previous academic years. However, following the recommendations of the ECOVE, several improvements are being gradually introduced in order to increase the active participation of undergraduate students in the full investigation and follow-up of patients during the Hospital Rotation:

- The current structure of the curriculum under the Spanish legislation assigns 300 ECTS to the Veterinary degree, hence it does not permit a lecture free final year. Therefore, to extend the clinical training within the framework of the legislation, an increase in the duration of Hospital Rotation, from 5 to 7 ECTS and from 2 to 3 weeks, was approved. (See correction of Major Deficiency Sub-standard 3.5).
- The Hospital Rotation activity will be carried all the year round (including the months of June, July and August), thus reducing the number of students per group that permits a better quality of teaching. The HVURC will extend the schedule of clinical activity by increasing the hours of attention to the public from 9 am to 6 pm.
- Students on Hospital Rotation will accompany a teacher during their daily clinical activity, so that they will be integrated into the different clinical services and will have the possibility to do a full follow-up of the clinical cases: accompany the patient in all complementary tests, participate in decision-making and administer medical-surgical treatments.
- New agreements between HVURC and horse breeding farms were signed to increase the caseload of horses and the possibility of interaction for students (see Annex 5.2.A).
- The new software for the digital management of clinical records (His-Vet) allows the student both an *in situ* and remote access to clinical records, thus facilitating students a comprehensive tracking of clinical cases.

See all changes in the Hospital Rotation already explained under 1.1.4.2

2.6.3. Suggestions of improvement

Internal reorganization of all Clinical Subjects, not only Hospital Rotation, must be encouraged in order to promote much stronger involvement of all students in the full investigation and follow-up of patients.

2.7. Minor deficiency 7: sub-standard 7.8, because of the unexplained accumulation of students in the 5th year

EXTRACT FROM THE FINAL REPORT AS ISSUED BY ECOVE ON 22 NOVEMBER 2018, page 34.

7.8.2. Comments

There is a high number of students accumulated in the fifth year of the programme and the same trend continues even though the FVL had expected this to be only a temporary phenomenon. Guidelines for termination of studies are not clear...

7.8.3. Suggestions for improvement

It is strongly suggested to the Establishment to clarify the reasons behind the accumulation of students in the fifth year and tailor support mechanisms accordingly. The guidelines for termination of studies should be clarified.

7.8.4. Decision

The Establishment is partially compliant with sub-standard 7.8, because of the unexplained accumulation of students in the fifth year.

2.7.1. Factual information

To determine the number of students enrolled (for any Degree), the USC uses two different estimators, and both are part of a specific software that collects all enrolment data, class hours and teaching staff (*Xescampus*).

The criterion used to determine the number of students enrolled in each academic year (Table 7.1.2 of the SER) was the so-called *Maximum Course*. In this case, to be considered a fifth-year student, it is enough to be enrolled in JUST ONE subject of the fifth year. Therefore, the observed accumulation of students in the fifth year is due to this bizarre way to calculate the students enrolled in the different terms of the curriculum, and for the objective pursued, certainly it is not correct. This is an administrative task that we didn't know in deep at the time of drafting the SER and these high figures were disregarded.

Instead of the *Maximum Course* criterion employed, we should have used the alternative estimator that considers the term/year in which the student enrolls the highest number of subjects, as the one to he or she really belongs to (*Most Subjects Course*). The table below shows the number of students for each course using both estimators: *Maximum Course criterium* (MC column) and the *Most Subjects Course criterium* (MSC column).

Year of programme	2016/2017		2015/2016		2014/2015		Mean	
Estimator	MC	MSC	MC	MSC	MC	MSC	MC	MSC
First year	106	128	108	125	116	143	110.00	132.00
Second year	130	119	140	149	137	144	135.67	137.33
Third year	130	165	135	148	131	135	132.00	149.33
Fourth year	114	143	111	117	101	109	108.67	123.00
Fifth year	218	143	154	109	120	74	164.00	108.00
Total	698		648		605		650.33	

2.7.2. Comments

The use of this alternative estimator (*Most Subjects Course*) is much more correct, and the excess of students detected in the SER for the 5th year using the *Maximum Course* criterion was certainly

confusing. In the new table made according to this alternative criterion (*Most Subjects Course*), the distribution of students throughout the curriculum is more rational and corresponds to reality.

Therefore, we estimate that there is no need to establish any corrective measure at this point.

2.7.3. Suggestions of improvement

None

2.8. Minor deficiency 8: sub-standard 8.9, because of sub-optimal assessment of day one competences

EXTRACT FROM THE FINAL REPORT AS ISSUED BY ECOVE ON 22 NOVEMBER 2018, page 43.

8.9.2. Comments

Students' logbooks ensure that the student has completed the defined training, but the quality control of the logbooks appears somewhat mechanical. Taking into account the deficiencies in the animal species in Standards 3 and 5 as well as the individual variation in students' clinical training, there is an evident risk that not all clinical competences are fulfilled. Confirming the attainment of clinical Day One Competences would require, in addition to the already used logbook and practice reports, direct assessment of the skills. Simulated patients and models could be used to complement the assessment.

8.9.3. Suggestions for improvement

Summative assessment of clinical skills using pre-defined criteria using methods such as OSCE (Objective Structured Clinical Examination) should be included in the curriculum.

8.9.4. Decision

The Establishment is partially compliant with sub-standard 8.9, because of sub-optimal assessment of Day One Competences.

2.8.1. Factual information

After the final report from the ECOVE, suggesting a better assessment of the clinical skills through methods such as OSCE, it was generated an internal debate and it became clear that different subjects were already using such objective and active methods for the assessment of clinical skills:

- The core subject **Clinical Propaedeutics** has been using the OSCE method for years to evaluate the clinical skills of students during clinical practices. There exists an orientation guide to the practice and, at the end of each practical session, the teachers evaluate the hands-on skills acquired, transfer the scores to a virtual notebook and sign it. Students have access to this logbook through the virtual campus.
- The core subjects **Veterinary Reproduction and Obstetrics I, II** and **Animal Reproduction Technology**, ever since have been carrying out a continuous evaluation of the clinical skills acquired by students throughout the different practical sessions and the numerical score awarded is reflected in their records.
- The core subjects **Veterinary Medical Clinic I and II**, since the academic year 2018-19, have introduced a panel of clinical skills objectives that all students must cover during clinical practices. The teacher who assigns the score, directly assesses the attainment of these competences. This record forms part of the continuous assessment of the student. In addition, at

the end of clinical practices, each student must solve one clinical quiz using pre-defined criteria (scoring rubrics). The last exercise meets two objectives: it is part of the student's continuous evaluation and serves as a training to prepare the subject's mandatory practical exam.

- In the clinical practices of the core subjects **Veterinary Anaesthesia and Reanimation** and **Clinical Veterinary Medicine and Surgery II**, the students must perform a series of clinical skills (intubation, intravenous catheter placement, monitoring, anaesthetic induction, surgical assistance, postoperative care), as part of the continuous assessment made by the teachers. At the end of each practical module, students must do either a presentation of an anaesthetic protocol or a clinical case followed during the clinical practices.
- In the core subject **Veterinary Diagnostic Imaging**, during the four tutorial sessions there is an assessment of the clinical skills acquired: each student must solve a series of true/false or short-answer questions based on radiographic and ultrasound slides related to real clinical cases. Students will demonstrate the ability acquired for reading the images, allowing to detect the individual variations in their clinical training.
- The three core subjects included in **Veterinary Anatomical Pathology** have been applying different methodologies to evaluate the acquisition of clinical skills during practical sessions. In **General Veterinary Anatomical Pathology**, the students deal with macropathology at the necropsy room on discharged organs from the slaughterhouse. In addition, they work with histopathology examples from clinical cases in the microscopy room; also, students have to solve quizzes and draw up clinical reports. In **Special Veterinary Anatomical Pathology I and II**, the students perform necropsies on cases received at the diagnostic service: they must take samples, write reports and discuss the cases between them. The professors directly assess Day-One Skills. Under the microscope following the guidelines given by the professor, students further investigate assigned clinical cases and prepare a public exposition of their conclusions. Specific objectives and evaluation methods with criteria and marks (through scoring rubrics) are available to the students at their virtual campus before starting the given subject.

2.8.2. Comments

To implement the use of the OSCE method in the evaluation of clinical skills using predefined criteria, in the last two academic years the FVL has organized two workshops on "Rubrics as an instrument for formative evaluation in Higher Education". Up to 54 professors of the FVL attended these workshops, and numerous clinical subjects begun to introduce scoring rubrics in their evaluation systems. We foresee new editions due to the requests made by the academic staff.

Hospital Rotation

To make a better assessment of Clinical Day One Competences, there has been adopted several modifications to improve the structure and development of Hospital Rotation:

- a. Modification of the objectives in the Hospital Rotation Logbook (see SER FVL 2018 Annex 3.5.2) to improve student follow-up when assessing the acquisition of different competencies.
- b. Assessment of the competences included in the logbook by means of scoring rubrics.
- c. Evaluation by scoring rubrics of the clinical case that all students must develop.
- d. OSCE method applied to the final evaluation of the students.
- e. During some afternoons, students will attend to clinical workshops:
 1. Sutures and venoclysis workshop on models from the Clinical Skills Lab.
 2. Traumatology workshop in dog bone models from the Clinical Skills Lab.
 3. Horse lameness workshop and use of horse limbs to practice anaesthetic blockages.

4. Workshops on Diagnostic Imaging by means of images of real clinical cases.

See all changes in the Hospital Rotation already explained under 1.1.4.2

2.8.3. Suggestions of improvement.

None

2.9. Minor deficiency 9: sub-standard 9.2, because of insufficient recruitment of junior staff and because of insufficient specialised academic staff in some key clinical disciplines

EXTRACT FROM THE FINAL REPORT AS ISSUED BY ECOVE ON 22 NOVEMBER 2018, page 45.

9.2.2. Comments

The average age of academic staff is of great concern given that a generation of teachers has been lost. This situation must be swiftly rectified if the long-term viability of the teaching Establishment is to be maintained.

9.2.3. Suggestions for improvement

Make the recruitment of younger staff a priority goal for the Establishment. Produce a strategic plan and an implementation plan to close the 'generation gap' that currently exists amongst the staff. Also restructure departments to make staff allocation more flexible and make it easier to achieve the Establishment's long-term strategic goals.

9.2.4. Decision

The Establishment is partially compliant with sub-standard 9.2, because of insufficient recruitment of junior staff and because of insufficient specialised academic staff in some key clinical disciplines.

2.9.1. Factual information

It is a fact that in recent years, due to the economic situation in Europe in general, and in Spain in particular, Spanish Government decided to decrease recruitment in the public sector including Universities. This significantly affected the ability of renewal of the academic staff in all university establishments, and FVL as well.

Fortunately, the economic situation has improved. In this new scenario, the University of Santiago de Compostela (USC) has designed a Four-Year Strategic Plan for Academic Staff 2019-2022, approved by the USC Government Board on March 2019.

2.9.2. Comments

This strategic plan aims to lay the foundation for a new staff recruitment policy for the USC in the immediate future. It intends to guarantee a sufficient and suitable endowment of the different areas of knowledge through quality contracts as well as to assure the replacement of personnel by incorporating new teachers ([link to the pdf file](#)).

Since the EAEVE visit in 2018, but before the application of this new strategic plan, the FVL had already added 3 new Assistant Professors to its academic staff (1 in Clinical Veterinary Medicine and Surgery and 2 in Food Hygiene). The people who gained access to these new positions belong to the so call junior staff, which contributes to closing the "generational gap" that currently exists.

Recently, 2 Assistant Clinical Professor from HVURC have promoted to a higher academic category (Assistant Professor), and FVL have obtained the commitment of the USC Government for

the promotion of the remaining 6 Assistant Clinical Professors of the HVURC. These are young academic staff specialized in clinical disciplines and fully integrated into teaching activities.

Considering also that younger staff are getting new accreditations to access teaching positions in the FVL, there is the clear hope that this generational gap mentioned will be closed in the years ahead.

The indications of the EAEVE Visitors' Report have been very useful in sensitizing the University authorities to the real needs of our Establishment. And so, we really trust that the new USC recruitment policy will contribute to renew the academic staff of the FVL.

At the same time, the FVL and the HVURC are making a commitment to the specialization of the academic staff in the clinical areas. The number of European Veterinary Diplomates has increased since the last EAEVE evaluation in 2008, as well as those Veterinary Specialists awarded by the Spanish Veterinary Association AVEPA (see FVL SER 2018 - Annex 9.3).

Unfortunately, the economic situation derived from the pandemic has turned to be difficult. Despite this, during the academic years 2019-20 and 2020-21, 6 new contracts of Assistant Professors (with PhD) were consolidated.

2.9.3. Suggestions of improvement

Since the Spanish University System and the Spanish Veterinary College Organization do not officially recognize any degree from the European Veterinary Specialist Colleges awarded by the EBVS (see correction of Minor deficiency 10; sub-standard 10.4), it would be very helpful if the EBVS were encouraged to be recognized by the European Association for Quality Assurance in Higher Education -ENQA-.

Once the EBVS appears in the European Quality Assurance Register for Higher Education, it could be possible that the Spanish University System begins to consider the European Veterinary Specialization (Diplomates) as a relevant merit for the professional progression and recruitment of the academic staff.

2.10. Minor deficiency 10: sub-standard 10.4, because of the absence of residency programmes in most common clinical disciplines

EXTRACT FROM THE FINAL REPORT AS ISSUED BY ECOVE ON 22 NOVEMBER 2018, page 49.

10.4.2. Comments

The two residency programmes and the science education activities are interesting but considered insufficient.

10.4.3. Suggestions for improvement

It is necessary to increase the number of residency programmes in most of the clinical subjects...

Further, the improvement of the doctorate programme has to be taken into consideration.... Activities which may support the educational goal in the PhD programme should be supported...

Research PhD programme policy should be focused on the effort to improve international collaboration and student mobility.

10.4.4. Decision

The Establishment is partially compliant with sub-standard 10.4. because of the absence of residency programmes in most common clinical disciplines.

2.10.1. Factual information

Veterinary faculties in Spain have great problems in establishing residency programmes because, both the Spanish University System and the Spanish Veterinary College Organization do not officially recognize any degree from the European Veterinary Specialist Colleges awarded by the EBVS.

EBVS is a private association, not yet recognized by the European Association for Quality Assurance in Higher Education -ENQA-. Therefore, the European Veterinary Specialist (Diplomates) lack academic or professional official validity in our country, and for this reason it is not considered a relevant merit for the professional progression of the academic staff.

2.10.2. Comments

Regardless of this reality, the FVL and the HVURC are making great efforts to recruit specialized clinical staff holding EBVS (or American) Diplomas. The number of European Veterinary Diplomates has increased since the last EAEVE evaluation in 2008, as well as those Veterinary Specialists awarded by the Spanish Veterinary Association AVEPA (see FVL SER 2018 - Annex 9.3).

The HVURC is trying to improve the specialization of its Clinical Staff and the following actions are being carried out:

1. Planning residency programmes in those specialties in which HVURC already has European diplomates: Animal Welfare and Animal Behavioral Medicine and Animal Reproduction.
 - a. The Animal Welfare and Behavioral Medicine residency programme started on May 1, 2019.
 - b. The Animal Reproduction residency programme is scheduled to begin next year, funding pending.
2. An -initially part-time- employment of a European Diplomat in Equine Surgery with the double purpose of increasing the caseload of horses and improving the quality in this clinical service.

The VTH-Rof Codina agreed a part-time dedication contract with an EBVS and AVMA Diplomat on equine surgery, Antonio Cruz Madorrán, but with the pandemic he had no chance to start consultation.

3. The design of a strategic plan encouraging the incorporation of new European Diplomates in those most relevant clinical areas.
4. The incorporation of new European Diplomates will undoubtedly lead to the implementation of residency programmes that will provide feedback to the system.

Apart from the initiatives of the HVURC, the execution of another residency programmes will be encouraged:

1. A European residency programme for Specialization in Aquatic Animal Health is planned to be carried out. The residency will take a minimum duration of three years and will be coordinated by two ECAAH Diplomates in our Faculty.

The ECAAH allows the compatibility of PhD studies and Diplomat Residency; for this reason, the 4 ECAAH Diplomates in our Faculty are promoting Marie Curie grants to get new PhD students who must follow in parallel the Diplomat Residency programme.

2. A European residency programme on Bovine Health and Management, could be also offered if adequate funding would be provided.

Regarding the other suggestions for improvement: *“10.4.3. ...Further, the improvement of the doctorate programme has to be taken into consideration.... Activities which may support the educational goal in the PhD programme should be supported.... Research PhD programme policy should be focused on the effort to improve international collaboration and student mobility”*

First, it is important to clarify that in the University of Santiago de Compostela, the organization of PhD programmes does not depend on the faculties. Such programmes are coordinated through the International Center for Advanced Doctorate Studies (CIEDUS). In addition, each research group has absolute autonomy concerning its management and counts on the general services of the USC for technical advice and support.

Once explained this organizational system, it is noteworthy to say that the FVL hosts internationally recognized and highly competitive research groups. In this sense, it is necessary to highlight that the research groups in the FVL already develop a huge international collaboration from which postgraduate students benefit (see FVL SER 2018 - Annexes 10.1.1 and 10.1.2)

Within this organizational framework, a recently created strategic research cluster (BioReDes) ([link to the website html](#)) brings together 16 research groups (7 of them in the veterinary faculty).

Since its creation, BioReDes supports numerous activities aimed at training young researchers as well as strengthening national and international collaborations and mobility.

The organization's activities aimed at students are diverse:

- The first Friday of each month there is an initiative conceived as a space of interaction created to give visibility to scientific issues of special interest for their social, economic, environmental and innovation impact. Undergraduate and PhD students regularly attend this activity (*“Xantares Biocientíficos”*).
- In July 2019, the first edition of the BioReDes Research Summer School (BioReSuS) aimed at undergraduate and Master students took place. Its purpose was to contribute to the students' research training in an interdisciplinary context, fostering their interest in research in areas of sustainable primary production and food safety and quality.
- In November 2019, the I Congress of Young Researchers in Sustainable Primary Production and Food Safety and Quality was held.

BioReDes also carries out various actions aimed at improving the international positioning of the research groups:

- Development of an international mobility programme.
- A programme of visiting researchers in the framework of scientific collaborations and positioning in the major European initiatives and platforms.
- Organization of workshops, oriented to design the strategy and to evaluate the internationalization opportunities of the research groups.
- Experts in European research programmes (H2020; Interreg) were invited to increase mobility programmes.

Recently BioReDes has received the approval of a project by the Galician Tourism Agency (*“O Teu Xacobeo program”*). This project is an opportunity to connect research with the productive and social environment. Undergraduate and graduate students will participate in the activities and first-

hand learn on the importance of this strategic sector in Galicia and its national and international projection.

2.10.3. Suggestions of improvement

Hiring new contractual figures such as Diplomates from the HVURC will require changes in the rules governing this institution that should be inexcusably materialized, and new positions adequately funded.

It would be very helpful if the EBVS were encouraged to be recognized by the European Association for Quality Assurance in Higher Education -ENQA-, as a first step so that the European Veterinary Specialist (Diplomates) could in the future be officially recognized by the Spanish university system.

2.11. Minor deficiency 11: sub-standard 11.1, because of insufficient involvement of external stakeholders in Quality Assurance

EXTRACT FROM THE FINAL REPORT AS ISSUED BY ECOVE ON 22 NOVEMBER 2018, page 49.

11.1.2. Comments

...The FVL has an established system for QA and an ambition to continuous enhancement of quality. However, there are still challenges regarding the simplicity of the processes and involvement of the external stakeholders as the Establishment states in their SER.

11.1.3. Suggestions for improvement

It is suggested to the Establishment to 1) find ways for the external stakeholders to participate in QA and 2) create new approaches to increase the survey response rates and closely monitor the impact of them.

11.1.4. Decision

The Establishment is partially compliant with sub-standard 11.1, because of insufficient involvement of external stakeholders in Quality Assurance.

2.11.1. Factual information

The FVL has an established system for QA and an ambition to continuous enhancement of quality. External stakeholders are present in the organizational structure of the FVL by means of USC Social Council and FRC Board. Additionally, the Establishment maintains a continuous, but informal, interaction with different stakeholders: Official College of Veterinarians, Public Administration, private and professional associations and private companies in the veterinary sector.

On the other hand, the response rates of satisfaction surveys have been very low in the recent academic years shown and the Establishment has not taken any systematic actions to increase.

2.11.2. Comments

2.11.2.a. Regarding the first suggestion: find ways for the external stakeholders to participate in QA

Following the recommendations of the ECOVE, the FVL has created a stable External Advisory Committee (approved by the Faculty Council in June 26, 2019, in accordance with the guidelines of the SGC and QA). It is expected to be held its constitutional assembly in February 2020.

The constitutional meeting of the External Advisory Committee was delayed because of the pandemic and finally took place on 10 February 2021.

The External Advisory Committee is a consultative body of the Faculty with the following missions:

- To discuss social tendencies and eventual changes that might be of interest for the teaching and research activity of the faculty.
- To transmit the information concerning the Establishment's activity to the society promoting a greater impact on the social environment.
- To provide the necessary advice towards the elaboration and implementation of the Faculty's strategic plan.

The External Advisory Committee will meet at least once a year and keep the minutes of its meetings. To facilitate the collection of information for the necessary consultations, there will be alternative mechanisms to permit an easy participation of its members (requesting reports, surveys, etc.).

The composition of the External Advisory Committee of the FVL is as follows.

- Galician Council of Veterinary Colleges (President)
- Galician Public Administration
 - Department of Agriculture
 - Department of Public Health
- Spanish Veterinary Business Confederation (CEVE)
- Spanish Association of Veterinarians Specialists in Small Animals (AVEPA)
- Spanish Association of Bovine Medicine Specialists (ANEMBE)
- Spanish Equine Veterinary Association (AVEE)
- Galician Porcine Veterinary Association (AGAVEPOR)
- Galician agri-food Cooperative (COREN)
- Technology Platform of the University Campus of Lugo - BioRedes
- Representative of the Veterinary Epidemiology and Public Health Area at the Royal Veterinary College. University of London. UK: Prof. Javier Guitián
- Advisor in terms of standards of Veterinary Education in Europe: Prof. Ana Bravo (EAEVE past-President)

2.11.2.b. Regarding the second suggestion: create new approaches to increase the survey response rates and closely monitor the impact of them

The low response rate to the surveys posed to students is currently a widespread problem throughout the Spanish university that probably can be extrapolated to other countries.

There are strategies to try to encourage participation such as to reduce the number of questions, not sending the surveys at the end of the week or at the end of the day, or encouraging students in class

to participate by stressing the importance of their advice for the continuous enhancement of the whole system. Unfortunately, all these actions have been implemented already by the FVL with no better results.

We have considered the possibility of placing the participation to the survey as requisite to access to the contents of the virtual campus or even to know the exam qualifications. However, this would be a double-edged sword with higher response rate, but answers done automatically just to pass the filter, and therefore unreliable results.

2.11.3. Suggestions of improvement

Up to now, we have not come up with a system that seems feasible and different from what we already do, so we will continue trying to improve the current procedure as much as possible, while being attentive to new ideas about it.

3. ESEVT Indicators

3.1. Factual information

	Raw data from the last 3 full academic years	2016-17	2015-16	2014-15	Mean
1	n° of FTE academic staff involved in veterinary training	98.87	98.27	99.09	98.74
2	n° of undergraduate students	698.00	648.00	605.00	650.33
3	n° of FTE veterinarians involved in veterinary training	68.73	68.97	70.16	69.29
4	n° of students graduating annually	83.00	67.00	38.00	62.67
5	n° of FTE support staff involved in veterinary training	47.05	47.05	48.85	47.65
6	n° of hours of practical (non-clinical) training	850.50	850.50	850.50	850.50
7	n° of hours of clinical training	675.00	675.00	675.00	675.00
8	n° of hours of FSQ & VPH training	229.00	229.00	229.00	229.00
9	n° of hours of extra-mural practical training in FSQ & VPH	30.00	30.00	30.00	30.00
10	n° of companion animal patients seen intra-murally	5548.00	5466.00	5749.00	5587.67
11	n° of ruminant and pig patients seen intra-murally	42.00	33.00	42.00	39.00
12	n° of equine patients seen intra-murally	47.00	130.00	121.00	99.33
13	n° of rabbit, rodent, bird and exotic patients seen intra-murally	145.00	199.00	224.00	189.33
14	n° of companion animal patients seen extra-murally	1.00	1.00	0.00	0.67
15	n° of individual ruminants and pig patients seen extra-murally	970.00	1116.00	1216.00	1100.67
16	n° of equine patients seen extra-murally	120.00	50.00	84.00	84.67
17	n° of visits to ruminant and pig herds	785.00	776.00	768.00	776.33
18	n° of visits of poultry and farmed rabbit units	46.00	45.00	33.00	41.33
19	n° of companion animal necropsies	174.00	192.00	226.00	197.33
20	n° of ruminant and pig necropsies	123.00	141.00	114.00	126.00
21*	n° of equine necropsies	10	5	3	2.67
22	n° of rabbit, rodent, bird and exotic pet necropsies	222.00	165.00	251.00	212.67
23	n° of FTE specialised veterinarians involved in veterinary training	20.00	20.00	20.00	20.00
24	n° of PhD graduating annually	42.00	60.00	37.00	46.33

	Calculated Indicators from raw data	FVL values	Median values	Minimal values	Balance
I-1	n° of FTE academic staff involved in veterinary training / n° of undergraduate students	0.15	0.16	0.13	0.02
I-2	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	1.10	0.87	0.59	0.51
I-3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	0.76	0.94	0.57	0.19
I-4	n° of hours of practical (non-clinical) training	850.50	905.67	595.00	255.50
I-5	n° of hours of clinical training	675.00	932.92	670.00	5.00
I-6	n° of hours of FSQ & VPH training	229.00	287.00	174.40	54.60
I-7	n° of hours of extra-mural practical training in FSQ & VPH	30.00	68.00	28.80	1.20
I-8	n° of companion animal patients seen intra-murally / n° of students graduating annually	89.16	70.48	42.01	47.16
I-9	n° of ruminant and pig patients seen intra-murally / n° of students graduating annually	0.62	2.69	0.46	0.16
I-10	n° of equine patients seen intra-murally / n° of students graduating annually	1.59	5.05	1.30	0.29
I-11	n° of rabbit, rodent, bird and exotic seen intra-murally / n° of students graduating annually	3.02	3.35	1.55	1.48
I-12	n° of companion animal patients seen extra-murally / n° of students graduating annually	0.01	6.80	0.22	-0.21
I-13	n° of individual ruminants and pig patients seen extra-murally / n° of students graduating annually	17.56	15.95	6.29	11.27
I-14	n° of equine patients seen extra-murally / n° of students graduating annually	1.35	2.11	0.60	0.76
I-15	n° of visits to ruminant and pig herds / n° of students graduating annually	12.39	1.33	0.55	11.84
I-16	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	0.66	0.12	0.04	0.61
I-17	n° of companion animal necropsies / n° of students graduating annually	3.15	2.07	1.40	1.75
I-18	n° of ruminant and pig necropsies / n° of students graduating annually	2.01	2.32	0.97	1.04
I-19*	n° of equine necropsies / n° of students graduating annually	0.096	0.30	0.09	0.003
I-20	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	3.39	2.05	0.69	2.70
I-21	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0.32	0.20	0.06	0.26
I-22	n° of PhD graduating annually / n° of students graduating annually	0.74	0.15	0.09	0.65

3.2. Comments

Considering that all modifications of the curriculum oriented to correct the major and minor deficiencies have been approved by the Faculty Council in May 14, 2019 and USC Government Board in July 18, 2019, indicators have not changed from those showed in SER FVL 2018, which were already above the required values. These indicators do not include the increase in practical hours at Rotation Hospital and other Core Subjects explained in chapters 1.1 and 2.2, that are being implemented during the current academic year.

*The only updated indicator corresponds to the number of equine necropsies (I-19), as it reflects the efforts made to substantially increase these numbers that were slightly negative in SER FVL 2018 (see correction of Minor deficiency 4; sub-standard 5.1).

Update of the number of patients used in practicals with students			
YEAR	EQUINES Intramural (<i>extramural</i>)	PORCINE Intramural (<i>extramural</i>)	RUMINANTS Bovine+Ovine+Caprine Intramural (<i>extramural</i>)
2018	70 (147)	14 (13)	552+22+14 (502+15+12)
2019	408 (109)	36 (34)	1477+24+13 (1256+16+11)
2020	61 (245)	23 (12)	2119+47+18 (1998+35+12)

As you can see in the table, the number of equine patients, both intramural and extramural, were substantially increased.

Update of the number of cadavers necropsied by the students in the core subjects Special Veterinary Pathology I and II (3rd year)			
YEAR	PORCINE	EQUINES	RUMINANTS (cattle, sheep, goats)
2018	138	2	83 (49+28+16)
2019	97	13	71 (54+11+6)
2020*	43	6	46 (40+2+4)

* In the second semester of the academic year 2019-2020, practicals were cancelled by confinement and closure of the Faculty; all cadavers were used only in the 5th semester (**Special Veterinary Pathology I**) of the academic year 2020-21. To compensate, students realised virtual necropsies and wrote necropsy reports on real cases. Students of **Special Veterinary Pathology II** were offered to recuperate, on a voluntary basis, the necropsies in September 2020.

As you can see in the table, the number of equine necropsies was substantially increased.

3.3. Suggestions of improvement

Indicator values will be assessed regularly, and efforts will be made to further raise the values especially in those indicators where the establishment is close to the minimum values required by EAEVE.

This addendum was prepared by the EAEVE's Committee of the Faculty and endorsed by the Faculty Board on 12 February 2021.

Members of the EAEVE's Committee of the Veterinary Faculty in Lugo

Chair: Gonzalo Fernández Rodríguez – Dean

Degree coordinator: Natalia Vilariño del Río

Representatives of Departments:

Andrés Barreiro Lois,
Carlos Manuel Franco Abuín
Joaquín Hernández Bermúdez
María Isabel Quiroga Berdeal
Margarita Rico Gómez
Pedro García Herradón
Rosario Panadero Fontán

Representative of the VTH: Antonio González Cantalapiedra

Liaison Officer: Ana María Bravo Moral

Collaborators:

Ana María López Beceiro
Cristina Castillo Rodríguez
Germán Santamarina Pernas
Izaskun Ibarguren Ariceta
José María Alonso Mejjide
Luis Ángel Quintela Arias
Patricia Fernández de Trocóniz Revuelta
Rafaela María Amaro González

4. ANNEXES

Annex 3.5.A

Agreements with swine breeding farms

See two (2) new agreements

Annex 3.5.B

Curriculum (frontal) hours in EU-listed subjects taken by each student

Annex 4.7.A

Improved housing, exploration and hospitalization facilities for horses in HVURC.

Annex 4.7.B

Swine Experimental Teaching Farm Project

See New Boar Centre Plan

Annex 4.7.C

Experimental Teaching Dairy Farm Building Plans

Annex 5.1

Official agreement USC-GESUGA

Annex 5.2.A

Agreements between HVURC and horse breeding farms

Annex 5.2.B

Equine caseload during the first semester of 2019

Annex 5.2.C

Bovine and equine high-fidelity reproduction Simulator Models

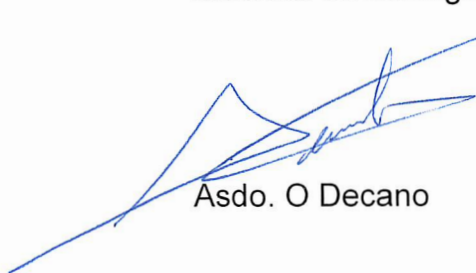
Annex 3.5.A

Agreements with swine breeding farms

ACORDO DE ADHESIÓN PARA A AUTORIZACION DE ACTIVIDADES ACADÉMICAS EN INSTALACIÓNS QUE NON PERTENCEN Á USC

Lugo, de abril de 2018

O Decano da Facultade de Veterinaria, autoriza a realización das actividades académicas prácticas correspondentes á materia Enfermidades Infecciosas I do Grao en Veterinaria, que impartirá o Profesor encargado da materia don Eduardo Yus Respaldiza e que consistirán en: visita as diferentes instalacións da explotación acompañado do persoal encargado da granxa; durante a visita os estudantes realizarán diversas cuestións sobre características da explotación e das instalación, Índices produtivos, alimentación e auga de bebida dos animais, manexo dos animais, xestión de xurros e outros residuos, medidas de bioseguridade e programas sanitarios.



Asdo. O Decano



Asdo. O Profesor

Don David Rivelo Muñoz, en representación da Cebadero Experimental de Bóveda, adhírese ao Documento aprobado no Consello de Goberno da Universidade de Santiago de Compostela de 16/12/2016 mediante o que se regula a autorización para a realización de actividades académicas prácticas en instalacións alleas á USC, cedendo as instalacións da Cebadero Experimental de Bóveda, da que é responsable, para a realización das actividades académicas descritas (véxase no reverso o Documento aprobado no Consello de Goberno coas condicións da adhesión). E terá efectos desde a súa sinatura e se manterá vixente salvo denuncia expresa por calquera das partes.

E en proba de conformidade, asinan por duplicado este acordo de adhesión no lugar e data arriba indicados.



Asdo. O responsable da Cebadero Experimental de Bóveda

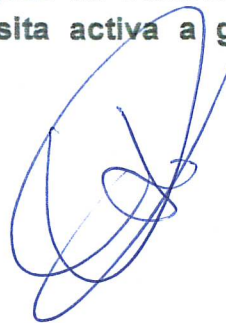
ACORDO DE ADHESIÓN PARA A AUTORIZACION DE ACTIVIDADES ACADÉMICAS EN INSTALACIÓNS QUE NON PERTENCEN Á USC

Lugo, 8 de marzo de 2018

O Decano da Facultade de Veterinaria, autoriza a realización das actividades académicas prácticas correspondentes á materia **Producción Animal 2** do Grao en Veterinaria, que impartirá o/a Profesor/a encargado da materia don **Fco. Javier Diéguez Casalta** e que consistirán en **visita activa a granxa de produción de porcino de raza Celta**



Asdo. O Decano



Asdo. O/a Profesor/a

Don **Saúl Rouco Trastoy**, en representación da **Granxa "Fraga do Coto"**, adhírese ao Documento aprobado no Consello de Goberno da Universidade de Santiago de Compostela de 16/12/2016 mediante o que se regula a autorización para a realización de actividades académicas prácticas en instalacións alleas á USC, cedendo as instalacións da **Granxa "Fraga do Coto"**, da que é responsable, para a realización das actividades académicas descritas (véxase no reverso o Documento aprobado no Consello de Goberno coas condicións da adhesión). E terá efectos desde a súa sinatura e se manterá vixente salvo denuncia expresa por calquera das partes.

E en proba de conformidade, asinan por duplicado este acordo de adhesión no lugar e data arriba indicados.

Asdo. O responsable da **Granxa "Fraga do Coto"**



ACORDO DE ADHESIÓN PARA A AUTORIZACION DE ACTIVIDADES ACADÉMICAS EN INSTALACIÓNS QUE NON PERTENCEN Á USC

Lugo, 20 de xaneiro de 2020

O Decano da Facultade de Veterinaria, autoriza a realización das actividades académicas prácticas correspondentes á materia ENFERMEDADES INFECCIOSAS I do Grao en Veterinaria, que impartirá o/a Profesor/a encargado da materia don/dona Alberto Prieto Lago y Gonzalo Fernández Rodríguez e que consistirán en

- Evaluación sanitaria del rebaño de acuerdo con los resultados de laboratorio, síntomas clínicos y indicadores productivos
- Recolección de muestras de suero para programa sanitario.
- Toma de muestras: suero, pelo y cartílago de la oreja.
- Vacunación y desparsitación
- Identificación
- Registros de explotación: tratamientos, identificación, visitas, etc..

Asdo. O Decano



Asdo. O/a Profesor/a

GONZALO FERNANDEZ RODRIGUEZ

ALBERTO PRIETO LAGO

Don/a SARIL ROUICO TRAF TOY
, en representación da CEA ES 27065037701 FRAGA DO COTO
adhírese ao Documento aprobado no Consello de Goberno da Universidade de Santiago de Compostela de 16/12/2016 mediante o que se regula a autorización para a realización de actividades académicas prácticas en instalacións alleas á USC, cedendo as instalacións da granxa, da que é responsable, para a realización das actividades académicas descritas (véxase no reverso o Documento aprobado no Consello de Goberno coas condicións da adhesión). E terá efectos desde a súa sinatura e se manterá vixente salvo denuncia expresa por calquera das partes.

E en proba de conformidade, asinan por duplicado este acordo de adhesión no lugar e data arriba indicados.

Asdo. O responsable da [empresa/institución]

Saril

ACORDO DE ADHESIÓN PARA A AUTORIZACION DE ACTIVIDADES ACADÉMICAS EN INSTALACIÓNS QUE NON PERTENCEN Á USC

Lugo, 10 de Marzo de 2020

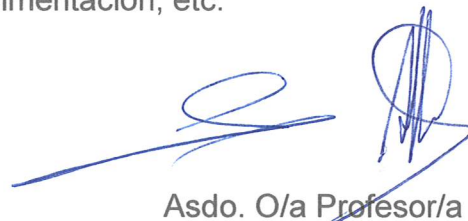
O Decano da Facultade de Veterinaria, autoriza a realización das actividades académicas prácticas correspondentes á materia Enfermidades Infecciosas I do Grao en Veterinaria, que impartirá o/a Profesor/a encargado da materia don/dona Gonzalo Fernández Rodríguez e Alberto Prieto Lago e que consistirán en:

Realización de una encuesta epidemiológica que abarca entre otros aspectos: parámetros productivos y sanitarios, programas sanitarios implementados, enfermedades infecto-contagiosas más frecuentes (abordaje de diagnóstico, tratamiento y control), medidas de bioseguridad establecidas, etc.

Se visitan las diferentes instalaciones del cebadero con las correspondientes explicaciones en cuanto a diseño de las mismas, controles ambientales, manejo sanitario de los animales, alimentación, etc.


Asdo. O Decano




Asdo. O/a Profesor/a

Don/a **Óscar López Viana**, en representación da **Empresa Óscar López Viana** adhírese ao Documento aprobado no Consello de Goberno da Universidade de Santiago de Compostela de 16/12/2016 mediante o que se regula a autorización para a realización de actividades académicas prácticas en instalacións alleas á USC, cedendo as instalacións da **Empresa Óscar López Viana** da que é responsable, para a realización das actividades académicas descritas (véxase no reverso o Documento aprobado no Consello de Goberno coas condicións da adhesión). E terá efectos desde a súa sinatura e se manterá vixente salvo denuncia expresa por calquera das partes.

E en proba de conformidade, asinan por duplicado este acordo de adhesión no lugar e data arriba indicados.


Asdo. O responsable da **Empresa Óscar López Viana**

DOCUMENTO DE ADHESIÓN PARA A ORGANIZACIÓN DE PRÁCTICAS DE CAMPO (acordo do Consello de Goberno da USC do 16 de decembro de 2016)

Facúltase aos Decanos/as ou Directores/as responsables das titulacións de grao nas que se realizan actividades académicas en instalacións alleas á USC e que así figuran nas respectivas memorias dos títulos á expedición da correspondente autorización para a realización das prácticas das materias que contemplan a realización de prácticas de campo, visitas activas, prácticas clínicas, etc. consonte a este modelo.

As actividades académicas que constitúen parte integrante da docencia das materias: visitas activas, prácticas de campo, prácticas clínicas, etc. (en adiante, **prácticas**) deberán ser dirixidas e supervisadas polo profesorado da USC que figura no Plan de Ordenación Docente (POD) da correspondente materia e só se poderán autorizar se así figuran contempladas na memoria da titulación.

Compromiso das partes

A Universidade comprométese a:

- Seleccionar aos estudantes que participarán nas prácticas. Así mesmo, organizará os grupos de asistencia que correspondan.
- Asignar ao profesorado preciso para a supervisión dos alumnos que realicen estas prácticas.
- Comunicar ás entidades que se adhiran a este Acordo o calendario das prácticas, a través dos responsables da Facultade

A empresa/institución comprométese a:

- Establecer os períodos para as prácticas de acordo cos responsables **do centro responsable da titulación**.
- Informar, a través dos seus responsables, ao profesorado e alumnado das normas de funcionamento da empresa, incluíndo as de confidencialidade, prevencións de riscos laborais e calquera outra que se deba seguir no centro.
- Facilitar o acceso aos espazos que considere conveniente ao profesorado e alumnado para a realización das prácticas.

Así mesmo, o alumnado deberá cumprir coas seguintes obrigas:

- Respetar as normas de funcionamento da empresa.
- Seguir as indicacións do profesorado encargado da supervisión do estudiantado.

Aseguramento do alumnado e responsabilidade civil

Estas actividades académicas estarán cubertas polo Seguro Escolar para os estudantes obrigados ao seu abono no momento da matrícula. No caso dos estudantes maiores de vinte e oito anos, deberán formalizar de xeito obrigatorio un seguro de accidentes.

Os danos a terceiros como consecuencia da realización da formación do alumnado estarán cubertos polo seguro de responsabilidade civil da USC.

ACORDO DE ADHESIÓN PARA A AUTORIZACION DE ACTIVIDADES ACADÉMICAS EN INSTALACIÓNS QUE NON PERTENCEN Á USC

Lugo, 10 de Marzo de 2020

O Decano da Facultade de Veterinaria, autoriza a realización das actividades académicas prácticas correspondentes á materia Enfermedades Infecciosas I do Grao en Veterinaria, que impartirá o/a Profesor/a encargado da materia don/dona Gonzalo Fernández Rodríguez e Alberto Prieto Lago e que consistirán en:

Realización de una encuesta epidemiológica que abarca entre otros aspectos: parámetros productivos y sanitarios, programas sanitarios implementados, enfermedades infecto-contagiosas más frecuentes (abordaje de diagnóstico, tratamiento y control), medidas de bioseguridad establecidas, etc.

Se visitan las diferentes instalaciones del cebadero con las correspondientes explicaciones en cuanto a diseño de las mismas, controles ambientales, manejo sanitario de los animales, alimentación, etc.


Asdo. O Decano




Asdo. O/a Profesor/a

Don/a **Óscar López Viana**, en representación da **Empresa Óscar López Viana** adhírese ao Documento aprobado no Consello de Goberno da Universidade de Santiago de Compostela de 16/12/2016 mediante o que se regula a autorización para a realización de actividades académicas prácticas en instalacións alleas á USC, cedendo as instalacións da **Empresa Óscar López Viana** da que é responsable, para a realización das actividades académicas descritas (véxase no reverso o Documento aprobado no Consello de Goberno coas condicións da adhesión). E terá efectos desde a súa sinatura e se manterá vixente salvo denuncia expresa por calquera das partes.

E en proba de conformidade, asinan por duplicado este acordo de adhesión no lugar e data arriba indicados.


Asdo. O responsable da **Empresa Óscar López Viana**

DOCUMENTO DE ADHESIÓN PARA A ORGANIZACIÓN DE PRÁCTICAS DE CAMPO (acordo do Consello de Goberno da USC do 16 de decembro de 2016)

Facúltase aos Decanos/as ou Directores/as responsables das titulacións de grao nas que se realizan actividades académicas en instalacións alleas á USC e que así figuran nas respectivas memorias dos títulos á expedición da correspondente autorización para a realización das prácticas das materias que contemplan a realización de prácticas de campo, visitas activas, prácticas clínicas, etc. consonte a este modelo.

As actividades académicas que constitúen parte integrante da docencia das materias: visitas activas, prácticas de campo, prácticas clínicas, etc. (en adiante, **prácticas**) deberán ser dirixidas e supervisadas polo profesorado da USC que figura no Plan de Ordenación Docente (POD) da correspondente materia e só se poderán autorizar se así figuran contempladas na memoria da titulación.

Compromiso das partes

A Universidade comprométese a:

- Seleccionar aos estudantes que participarán nas prácticas. Así mesmo, organizará os grupos de asistencia que correspondan.
- Asignar ao profesorado preciso para a supervisión dos alumnos que realicen estas prácticas.
- Comunicar ás entidades que se adhiran a este Acordo o calendario das prácticas, a través dos responsables da Facultade

A empresa/institución comprométese a:

- Establecer os períodos para as prácticas de acordo cos responsables **do centro responsable da titulación**.
- Informar, a través dos seus responsables, ao profesorado e alumnado das normas de funcionamento da empresa, incluíndo as de confidencialidade, prevencións de riscos laborais e calquera outra que se deba seguir no centro.
- Facilitar o acceso aos espazos que considere conveniente ao profesorado e alumnado para a realización das prácticas.

Así mesmo, o alumnado deberá cumprir coas seguintes obrigas:

- Respetar as normas de funcionamento da empresa.
- Seguir as indicacións do profesorado encargado da supervisión do estudiantado.

Aseguramento do alumnado e responsabilidade civil

Estas actividades académicas estarán cubertas polo Seguro Escolar para os estudantes obrigados ao seu abono no momento da matrícula. No caso dos estudantes maiores de vinte e oito anos, deberán formalizar de xeito obrigatorio un seguro de accidentes.

Os danos a terceiros como consecuencia da realización da formación do alumnado estarán cubertos polo seguro de responsabilidade civil da USC.

ACORDO DE ADHESIÓN PARA A AUTORIZACION DE ACTIVIDADES ACADÉMICAS EN INSTALACIÓNS QUE NON PERTENCEN Á USC

Lugo, 22 de diciembre de 2020

O Decano da Facultade de Veterinaria, autoriza a realización das actividades académicas prácticas correspondentes á materia Enfermedades Infecciosas I (G2091328) do Grao en Veterinaria, que impartirá o Profesor encargado da materia don Alberto Prieto Lago e que consistirán en:

- Realización de una encuesta epidemiológica para valorar los parámetros sanitarios y productivos, programa sanitario implantado, enfermedades infecciosas más frecuentes y medidas de bioseguridad implementadas.
- Revisión de las instalaciones y evaluación del diseño, control de condiciones ambientales, alojamiento y cría de los animales.

Asdo. O Decano

Gonzalo Fernández Rodríguez

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RODRIGUEZ
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Asdo. O Profesor

Alberto Prieto Lago

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ALBERTO - 36167907Q el día
28/12/2020 con un
certificado emitido por AC
FNMT Usuarios

Don/a **Angel Ruiz de Valbuena Bueno**, en representación da **Grupo Altopaso S.L.**, adhírese ao Documento aprobado no Consello de Goberno da Universidade de Santiago de Compostela de 16/12/2016 mediante o que se regula a autorización para a realización de actividades académicas prácticas en instalacións alleas á USC, cedendo as instalacións da **Grupo Altopaso S.L.**, da que é responsable, para a realización das actividades académicas descritas (véxase no reverso o Documento aprobado no Consello de Goberno coas condicións da adhesión). E terá efectos desde a súa sinatura e se manterá vixente salvo denuncia expresa por calquera das partes.

E en proba de conformidade, asinan por duplicado este acordo de adhesión no lugar e data arriba indicados.

Asdo. O responsable da **Grupo Altopaso**

DOCUMENTO DE ADHESIÓN PARA A ORGANIZACIÓN DE PRÁCTICAS DE CAMPO
(acordo do Consello de Goberno da USC do 16 de decembro de 2016)

Facúltase aos Decanos/as ou Directores/as responsables das titulacións de grao nas que se realizan actividades académicas en instalacións alleas á USC e que así figuran nas respectivas memorias dos títulos á expedición da correspondente autorización para a realización das prácticas das materias que contemplan a realización de prácticas de campo, visitas activas, prácticas clínicas, etc. consonte a este modelo.

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Compromiso das partes

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- Comunicar ás entidades que se adhiran a este Acordo o calendario das prácticas, a través dos responsables da Facultade

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- Facilitar o acceso aos espazos que considere conveniente ao profesorado e alumnado para a realización das prácticas.

Así mesmo, o alumnado deberá cumprir coas seguintes obrigas:

- Respetar as normas de funcionamento da empresa.
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Aseguramento do alumnado e responsabilidade civil

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Os danos a terceiros como consecuencia da realización da formación do alumnado estarán cubertos polo seguro de responsabilidade civil da USC.

Annex 3.5.B

Curriculum (frontal) hours in EU-listed subjects taken by each student

Annex 4.7.A

Improved housing, exploration and hospitalization facilities for horses in HVURC



LEYENDA

●	MÓDULO 1 - PRODEDEMENTOS ANIMAS MEDIANOS
●	MÓDULO 2 - CANINO
●	MÓDULO 3 - ANIMAS MEDIANOS
●	MÓDULO 4 - PROCEDEMENTOS ANIMAS GRANDES
●	MÓDULO 5 - EQUINO
●	MÓDULO 6 - VACUNO
●	MÓDULO 7 - ILLAMIENTO P2
●	MÓDULO 8 - ILLAMIENTO
●	MÓDULO 9 - MEDICINA NUCLEAR
—	ITINERARIO ANIMAL
—	ITINERARIO PEATONAL
●	PUNTO DE CONTROL DE ACCESO

HVU - RC

CERIOVET

MÓDULO 1 - PRODEDEMENTOS ANIMAS MEDIANOS

MÓDULO 2 - CANINO

MÓDULO 3 - ANIMAS MEDIANOS

MÓDULO 4 - PROCEDEMENTOS ANIMAS GRANDES

MÓDULO 5 - EQUINO

MÓDULO 6 - VACUNO

MÓDULO 7 - ILLAMIENTO P2

MÓDULO 8 - ILLAMIENTO

MÓDULO 9 - MEDICINA NUCLEAR

ITINERARIO ANIMAL

ITINERARIO PEATONAL

PUNTO DE CONTROL DE ACCESO

Annex 4.7.B

Swine Experimental Teaching Farm Project

Memoria da proposta para a creación dunha
explotación de Porco celta na finca Gayoso Castro



**Proposta de Asoporcel e do Campus Terra da USC para a
Deputación Provincial de Lugo.**

Maio de 2019



Memoria da proposta para a creación dunha explotación de Porco celta na finca Gayoso Castro

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1. Introducción

O xénero orixinario de tódolos porcinos e o *Sus* e establécense os tres troncos prehistóricos seguintes: *Sus scrofa* (xabarín europeo), *Sus mediterráneo* (xabarín mediterráneo) e *Sus vittatus* (porco asiático). O tronco celta procedería do cruce *Sus scrofa ferus* có Subxénero *striatosus*. A agrupación racial céltica estendeuse en maior ou menor medida polo Norte e Noroeste de España dando lugar a distintas razas, hoxe máis ou menos cruzadas como o Porco Chato de Vitoria, o Lerneño de Burgos, o Catalán de Vich, o Molinés de Guadalaxara, o Alistano de Zamora, a Galega ou Celta, e outras tamén por Centroeuropea e Portugal. De todas estas , moitas delas están hoxe desaparecidas.

Na actualidade a raza Porco celta forma parte do Catálogo Oficial de Razas de Gando de España coma unha raza autóctona española (*Anexo I do Real Decreto 45/2019, de 8 de febrero, por el que se establecen las normas zootécnicas aplicables a los animales reproductores de raza pura, porcinos reproductores híbridos y su material reproductivo, se actualiza el Programa nacional de conservación, mejora y fomento de las razas ganaderas y se modifican los Reales Decretos 558/2001, de 25 de mayo; 1316/1992, de 30 de octubre; 1438/1992, de 27 de noviembre; y 1625/2011, de 14 de noviembre. de 7 de novembro*).

Foi a raza porcina máis importante en Galicia ata comezos do século XX. No ano 1951, debido a intensificación das producións e a introdución de razas foráneas con maiores rendementos cárnicos e menores tempos de crecemento, xa solo o 14% do censo total porcino de Galicia era desta raza. E na década dos oitenta xa se constata a case completa desaparición.

Os traballos de recuperación da raza Porco celta iníciáanse no ano 1999 coa creación da ASOCIACIÓN DE CRIADORES DA RAZA PORCINA CELTA (ASOPORCEL). A día de hoxe segue sendo unha raza en perigo de extinción e estando moi lonxe de superar o limiar deste trance.

A raza Porco celta agrupa animais de gran tamaño de corpo alongado e extremidades longas, adaptadas á explotación en réxime extensivo.

É característico o perfil subcónico da cabeza e as grandes orellas caídas sobre os ollos.

Segundo a cor da capa diferéncianse tres variedades:

- Santiaguesa: capa branca
- Carballina: capa pintada con lunares de cor negra brillante

- Barcina: capa pintada con lunares de cor gris



Imaxe 1: as tres capas de Porco celta (Santiguosa, carballina e barcina)

2. Xustificación da necesidade do proxecto

USC:

2.1. Dunha banda, a Facultade de Veterinaria recibiu recentemente a visita da Axencia de Acreditación Veterinaria Europea (EAEVE <https://www.eaeve.org/>) a partir da cal se realizou un informe indicando algunhas áreas docentes susceptibles de ser reforzadas, entre elas sinalábase a importancia de incluír formación práctica na exploración e reprodución de gandería porcina, o que presenta unha boa oportunidade para o desenvolvemento da oferta formativa e investigadora da Facultade de Veterinaria neste eido temático. Ademais, a Escola Politécnica Superior de Enxeñería (EPSE) imparte á súa vez varias materias susceptibles de facer uso das instalacións, así como distintas liñas de investigación centradas na produción porcina e o silvopastoreo.

ASOPORCEL

2.2. De outra, a Asociación de criadores da raza porcina Celta (Asoporcel) ven traballando na recuperación da raza de Porco celta, chegando a unha fase de crecemento notoria, tanto polo aumento de ganderías dedicadas a esta actividade como polo aumento dos censos dos animais. Ó peche do ano 2018 contábase con algo máis de 700 porcas nai e case 180 sementais, distribuídos en 124 explotacións de toda Galicia, se ben, o 44% destas localízanse na provincia de Lugo.

Asoporcel é a única entidade oficialmente recoñecida para a levanza do libro xenealóxico da raza Porco celta segundo o decreto 149/2011

Para apoiar o crecemento da raza Porco celta resultaría apropiado dispor dun centro de recuperación e conservación da raza que servira como centro de mellora

xenética da raza.

DEPUTACIÓN PROVINCIAL DE LUGO

2.3. Neste contexto a Deputación Provincial de Lugo ofrece apoiar a construción dunhas instalacións para o establecemento dun rabaño de porco celta cun dobre obxectivo, por unha banda cubrir as necesidades docentes, investigadoras e de divulgación da Facultade de Veterinaria e da EPSE, e, por outra, proveer dunhas instalacións adecuadas para garantir o crecemento e mellora da raza autóctona de Porco celta. Esta proposta pretende servir de borrador para a concreción de dito proxecto nos vindeiros meses.

3. Obxectivos do proxecto

O proxecto ten un dobre obxectivo, por unha banda cubrir as necesidades docentes e investigadores descritas no apartado anterior, e, por outra fornecer o desenvolvemento da raza, Porco celta a través da posta en funcionamento dun centro de multiplicación para a reprodución e selección de animais da raza Porco celta como futuros reprodutores.

As instalacións propostas, contemplan tamén a formación para gandeiros e persoal relacionado, funcionando como un centro de transferencia de coñecementos ao sector, xa que ASOPORCEL é entidade autorizada para impartir programas de formación en materia de benestar animal (nº de rexistro BA-102/17).

Ademais, a parcela escollida dentro da finca Gayoso Castro alberga unhas instalacións en desuso o que redundaría no aproveitamento e recuperación destas instalacións e da parcela no seu conxunto.

3.1. Docencia e Investigación

En canto ao primeiro obxectivo, ademais da actividade docente recollida no **Anexo I**, a explotación proposta presenta múltiples oportunidades de investigación, tanto a nivel veterinario como agronómico, como por exemplo a dos grupos de investigación da EPSE e da Facultade de Veterinaria:

- BIOmodem:

A actividade do gando porcino en réxime extensivo inclúe actividades exploratorias como xogo, busca de alimento e refuxio, que require un estudo polo miúdo, para obter mellor deseño das instalacións que conleva, de distribución de alimento e auga e a dotación de zonas protexidas. A distribución de alimento complementario ao que se atopa no entorno representa o maior custe e ten unha grande incidencia sobre a produtividade, polo que a

introdución dos avances tecnolóxicos que distribúen individualizadamente o alimento, estacións de alimentación, é fundamental para proporcionar datos detallados do consumo de penso e do peso do animal, cunha cuantificación indirecta do consumido dende o entorno. Esta información debe ser complementada con datos de movemento (xeolocalización) e de ocupación de postos de alimento, auga e refuxios (sensores proximidade) e comportamento (cámaras de vídeo), para a obtención de patróns de actividade completos que, xunto con sensores ambientais (temperatura, humidade e gases), permitan determinar o nivel de benestar.

- SILVOPAST:

Que realizará actividades investigadoras relacionadas cos efectos dos animais sobre a vexetación do sotobosque, o arborado, o solo...e tamén a produción de froitos das árbores, o crecemento do arborado, o incremento de peso dos animais, etc.

- GI-1729 Recursos zoonéticos e as súas producións:

As actuais liñas de investigación do grupo fundaméntanse no estudo da calidade da carne en Galicia, os sistemas de produción animal e a mellora xenética e análise do patrimonio xenético de razas autóctonas de Galicia. O ter unha explotación en “ciclo pechado” ofreceríanos a oportunidade de profundar desde o punto de vista do gando porcino, coa raza autóctona Porco Celta, en cada unha das liñas anteriormente citadas, completando diversos proxectos de investigación que xa vimos realizando. Por este motivo propónse unha posible ampliación do proxecto no medio prazo a través da construción dunha pequena sala para completar unha explotación en ciclo pechado na que as tres fases produtivas (núcleo reprodutivo, transición, engorde) confluísen na mesma localización. A sala albergaría á fase de transición-cebo de animais con destino ao sacrificio. Co Porco Celta poderíase facilitar desde dita sala unha saída ao exterior coa que se poderían finalizar, en parte, o cebo como paso previo ao sacrificio.

3.2. Conservación da raza autóctona galega Porco celta

- A creación e mantemento dun rabaño para a conservación *ex situ* da raza, así como o engrosamento do banco de xermoplasma e ADN. A conservación *ex situ* consiste na preservación de animais vivos illados do seu medio habitual e/ou a colecta e conxelación de seme, ovocitos, embrións ou tecidos, que poden ser utilizados para recrear un animal.

Contémplanse como actuais bancos *ex situ* da raza porcina Celta, a colección de seme custodiada no Centro de Recursos Zoonéticos de Galicia e o rabaño da finca de Armariz (Ourense) pertencentes ó Inorde (Deputación Provincial de Ourense) e algún exemplar no propio centro de Fontefiz.

- A obtención de exemplares para a reprodución, seleccionados cos estándares raciais adecuados, cos que facer a reposición e/ou cambiar a liña xenética de efectivos reprodutores nas granxas que participan na conservación *in situ* da raza.

A conservación *in situ* consiste na cría activa de poboacións animais para a produción agrícola e alimentaria, de xeito que a diversidade sexa a un tempo utilizada o mellor posible a curto prazo para obter unha produción agrícola e alimentaria sustentable, e o mesmo tempo traducida a longo prazo no mantemento dos ecosistemas.

A realización de cruzamentos xenéticos de xeito dirixido para contribuír ó aumento dos censos de animais coas menores taxas de consanguinidade posibles, que é un dos parámetros a reducir no camiño cara a total recuperación da raza.

Aqueles animais que sexan descartados para a reprodución entrarán na fase de cebado para posterior sacrificio. Nestes lotes de animais poderanse medir e estudar parámetros produtivos que permitan optimizar a cantidade e calidade da produción, e que posteriormente se poidan trasladar ás granxas para a súa mellora.

- A realización de proxectos de investigación de diversa índole: Que permitan aumentar a produtividade das granxas, de xeito que esta actividade poida chegar a ser unha renda principal. Inclúense tamén posibles proxectos sobre aproveitamento silvopastoril e prevención de incendios.

4. Descrición do proxecto

A continuación detállanse os distintos elementos que compoñen esta proposta, incluíndo unha estimación somera dos custes. A finalidade desta aproximación é obter un primeiro marco de referencia a desenvolver en sucesivas etapas, incluíndo a participación doutros expertos para a definición final do proxecto e a posible incorporación de propostas complementarias co proxecto actual.

4.1. A finca

A finca sitúase na Granxa Gayoso Castro, exactamente na delimitación norte da mesma, lindando coa lagoa de Caque, coa estrada autonómica Lu-113 e coa pista que da entrada ás antigas instalacións avícolas, actualmente en desuso e en estado de abandono, e cunha extensión da redor das 2 has. (ver **Anexo II**). A parcela escollida presenta unha serie de vantaxes con respecto ás opcións baralladas en propostas anteriores, destacando a ubicación da mesma moi próxima ao persoal encargado do seu coidado e da maquinaria, o que garante un mellor

manexo e maior control sobre os animais.

4.2. Sistema produtivo

Propónse un sistema en semiextensivo para as femias xestantes como modelo medioambientalmente sostible, vencellado aos aproveitamentos tradicionais que inclúen a combinación de distintas especies autóctonas arbóreas, arbustivas e herbáceas xunto co manexo de razas do país, garantindo un nivel alto de benestar animal e promovendo a integración da gandería no entorno.

Para elo, manteríase un censo de entre 10 e 20 porcas nais e de 5 a 10 verróns. Trataríase de facer a extracción do seme dos verróns para preparar as doses seminais coas que inseminar as porcas nai.

As porcas durante a xestación estarían no exterior, ata o momento do parto que pasarían as gaiolas das maternidades, onde permanecerían ata o destete dos leitóns.

Os verróns e os animais en fase de transición terían o seus cubículos dentro da nave, sempre con saída a patios exteriores.

Os leitóns seleccionados como futuros reprodutores saírían na fase de destete-transición cara a novas explotacións, e aqueles que foran descartados para a reprodución entrarían na fase de cebado no exterior.

O aproveitamento da finca pode facerse cun sistema de rotación mediante peches de pastor eléctrico móbil que se irían rotando por toda a superficie susceptible de ser aproveitada polos porcos.

4.3. Instalacións

A finca seleccionada para a construción das instalacións está provista dunhas antigas instalacións en desuso e estado ruinoso (ver imaxe 1), este proxecto plantexa a posibilidade de recuperar parte da estrutura actual para a posta en funcionamento do proxecto. En concreto a nave máis meridional das tres que conforman a estrutura actual (ver **Anexo III**, plano de distribución da nave), o que conlevaría un proxecto complementario para a demolición e adecuación das estruturas aledañas (adxúntase estimación ao final dos **Anexos**¹).

¹ Correspondente ao Anexo VI, fonte: Deputación de Lugo



Imaxe 2: Estado actual das instalacións

O Orzamento e detalle das instalacións ven recollido con detalle no **Anexo IV**, cun montante total de **176.380,00 €**

A elaboración e execución do proxecto² supón un custe engadido do 10 %, que inclúe a redacción do proxecto (4%), a Dirección de Obra (4%) e a Coordinación de Seguridade e Saúde (2%). **Custe total 16.908 €**

Recoméndase, ademais, a adquisición dun sistema de alimentación computerizado que permitiría o control total sobre a alimentación do rabaño, abrindo distintas liñas de investigación e facilitando o manexo dos animais. Estimado nuns **10.000³ €**

4.4. Peche perimetral

Estímase unha distancia perimetral duns 700 metros, cun coeficiente de maioración do 20% que incluírían o peche⁴ total da finca e máis a segregación entre a pista de entrada e a superficie dedicada aos animais (Total 840 m.l.). As características do peche perimetral poden condicionar a ampliación do proxecto de cara a determinadas opcións polo que se inclúen dúas alternativas⁵:

² A porcentaxe aplicase aos conceptos recollidos no Anexo IV de: soleiras e estrutura de formigón, cerramentos e illamentos, distribución interior e complementos, automatización, instalación de almacenamento e tratamento de auga, instalación eléctrica, fontanaría e evacuación de xurros, instalacións de climatización, sistema de control ambiental, instalación das camisas de partos, aseos-vestiarios e oficina-laboratorio-aula

³ Entre 6.000 e 12.000 €

⁴ Considérase o mesmo tipo de peche para toda a finca, tanto a superficie de peche dos animais como do resto, o coeficiente de maioración do 20% inclúe as cancelas de entrada á finca.

⁵ Orzamento obtido da Empresa Ramudo Servizos Agrarios

- Peche de 1.8 metros de altura, prezo por metros lineais 6 euros = 5.040 €
- Peche de 2.0 metros de altura, prezo por metros lineais 7.5 euros = 6.300 €



Imaxe 3: Detalle do peche instalado pola empresa que proporcionou o orzamento perimetral

4.5. Sistema agroforestal

A finca presenta unha oportunidade para a plantación de especies arbóreas autóctonas, conformando un sistema de silvopastoral. Para completar o sistema agroforestal tradicional propónse a plantación de especies autóctonas e produtoras de froitos aproveitables para a alimentación dos animais como son o carballo común, o albar e o cerqueiro (*Quercus robur*, *Q. petraea* e *Q. pyrenaica*), a aciñeira (*Quercus ilex*), a sobreira (*Quercus suber*) e os castiñeiros (*Castanea sativa*). A planta de castiñeiro será enxertada sobre patrón híbrido con variedades do país: parede, garrida, de presa, ventura, longal, amarelante. Esta plantación combinarase ca plantación de distintas especies pratenses para a alimentación das nais de, cando menos, 2 fórmulas distintas de especies para realizar estudos de distintos modelos de pradeira.

- A superficie a repoboar sería dunhas 1.2 hectáreas cun marco de plantación de 10x10 metros, para garantir a visibilidade dos animais dende fóra, o que faría un total dunhas 120 árbores, das cales a metade serían castiñeiros e a outra metade unha combinación dos distintos *Quercus* spp. Considérase un prezo unitario de 15 € por castiñeiro enxertado (750 €) e de 10 por cada unha das outras especies (600 €). **Total 1.350 €**
- Reposición de marras: **500 €**
- Prevese, ademais, a instalación de protectores para protexer as árbores (120) da acción dos animais, cun custe de 2 €/ud. **Total 240 €**
- En canto ás labores precisas para a plantación estas requiren dun traballo de roce previo

cun custe de 300 €/ha ao longo de toda a finca (1.2 ha.), así como os custes de plantación de 1.000 € ha (1.2 ha). Cun **total de 1.560 €**

4.6. Control dos animais

Para cubrir o seguimento dos animais durante a noite e nos días non laborables recoméndase a instalación dun sistema de videovixilancia orientado cara os puntos de maior concorrencia dos animais: refuxios, comedeiros e bebedeiros. O sistema inclúe 8 cámaras, a montaxe e a derivación da liña eléctrica. **Total 3.400 €.**

4.7. Investimentos opcionais

Material auxiliar

Para manexo e experimentación difusión: material específico (material de laboratorio para control e dilución de seme, medios audiovisuais, dotación xeral da aula): **10.000 €**

Paneis explicativos:

Ao obxecto de facilitar a divulgación do proxecto entre os visitantes recoméndase o deseño e instalación de paneis explicativos cando menos nas proximidades exteriores dos tres puntos de concentración dos animais, onde se recolla información sobre os distintos compoñentes do sistema silvopastoral e da súa integración co hábitat que o rodea, así como unha breve explicación da importancia tradicional destes sistemas e as oportunidades que presentan nun contexto de deterioro medioambiental. Os custes estímense nuns **2.000 €**

5. Inversión total do proxecto

5.1. Inversión material para a posta en funcionamento do proxecto

A proposta suma unha cantidade total de **227.378⁶ € euros** (ver **Anexo V**), no escenario en que se inclúan os investimentos opcionais, sendo modulable a proposta en varios dos seus aspectos.

Total 227.378 €

⁶ Nesta estimación non se inclúen os custes correntes

6. Achegas das partes ao proxecto⁷

6.1. USC

A. Proxecto:

Para a posta en funcionamento do proxecto a USC asumirá a redación do mesmo, correspondente ao 4% do montante das instalacións, e valorado en **6.763 euros**.

Por outra banda, a universidade xa está a traballar na realización dun Plan de ordenación e Xestión integral da finca Gayoso Castro nos vindeiros meses. Para a súa elaboración traballárase en coordinación e colaboración cos técnicos da Deputación e as distintas asociacións e actores con intereses na mesma, estando pendente o inicio do proceso participativo a unha reunión previa cos responsables da Deputación para definir os obxectivos principais do Plan.

Este plan de ordenación valórase en **5.000 €**

Total achegas neste apartado 11.763 €

B. Inversión en equipamentos:

Aproveitando a oportunidade que xeneran as instalacións propostas a USC, a través do seu grupo de investigación BioModem, adquirirá un medidor de gases fotoacústico (**anexo vii**) para o seu uso investigador na explotación no eido do ben estar animal cun custe total de 115.500 €, inversión redundaría na mellora das condicións de benestar dos animais e nas oportunidades de investigación e transferencia de coñecementos ao sector.

⁷ Todos os datos incluídos neste epígrafe son estimativos

Outro equipamento aportado polos grupos de investigación:

- BioModem

Equipo	Uds.	Custe Ud.	Custe Total
Estación meteorolóxica HOBO Weather Station "HWS", unidade principal con 500.000 lecturas de memoria para 15 sensores intelixentes. Inclúe caixa intemperie e trípode de montaxe con soporte basculante para unha altura de 2,5 m	1	3100	3100
Sensores de temperatura/H. Relativa 0-100% con cable de 8 m. Precisión ± 0.2 °C, 2.5 %RH;	4	250	1000
Transmisor de velocidade do aire con sonda omnidireccional de arame quente	1	900	900
Detectores de infravermellos PID para medición da actividade animal	4	80	320
Sistemas de rexistro de datos HOBO® FlexSmart	2	900	1800
Sistema de registro Campbell CR10X	1		
Envolvente con grao de protección IP65 para albergar os equipos de automatización e control	1	1250	1250
TOTAL			8370
Mantemento de equipos		1000 €/ano	

- Aportacións de equipamento de outros grupos de investigación de veterinaria:

Cámaras para el estudio del comportamiento de los animales 5 cámaras sistema grabación y tarjeta para comunicación con móvil	2000 €
Ecógrafo y Detección de preñez	2000 €
Medición de tocino dorsal	700 €
Desarrollo software producción, manejo, alimentación, reproducción, sanidad, gestión	8000 €
Total	12.700 €

As inversións en equipamento aportadas pola USC para a granxa suman un total de **136.570 €**

C. Docencia e investigación:

Tanto a Facultade de Veterinaria como a Escola Politécnica Superior de Enxeñería contemplan entre os ámbitos de formación o estudo da produción porcina dende diversos enfoques, e inclúen unha serie de materias que, de realizarse o proxecto, poderían desenvolver os seus *curricula* formativos nas instalacións propostas.

A continuación presentase unha relación das materias que levarían a cabo a súa formación práctica e a cuantificación das achegas que supón.

Facultade de veterinaria

- Área de sanidade animal (programa sanitario, vacinación, desparasitación, etc.): 14 grupos

- de 10 alumnos con 4-5 horas de duración
- - Área de reprodución (recollida e valoración seminal, inseminación, programa de control reproductivo, etc.): 14 grupos de 10 alumnos con 4-5 horas de duración.
 - Área de produción animal (producción, bienestar, deseño de instalacións, etc): 14 grupos de 10 alumnos con 4-5 horas de duración.
 - Área clínica (exploración, medicina interna e cirurxía): 17 grupos de 7 alumnos con 4-5 horas de duración.

Escola Politécnica Superior de Enxeñería

- Zootecnia (1 grupo con 10 horas de duración)
- Xenética e mellora (1 grupo con 5 horas de duración)
- Zooloxía e fisioloxía Animal (1 grupo con 10 horas de duración)
- Construción de Aloxamentos gandeiros (1 grupo con 5 horas de duración)
- Sistemas de produción gandeira (1 grupo con 10 horas de duración)
- E. Forestal e do Medio Natural (1 grupo con 5 horas de duración)
- Pascicultura e Sistemas Agroforestais (1 grupo con 5 horas de duración)
- E. Agronómica (1 grupo con 5 horas de duración)
- Mellora xenética animal (1 grupo con 10 horas de duración)
- Tecnoloxías da Producción animal (1 grupo con 5 horas de duración)

A preparación de cada hora de prácticas supón un investimento de 4 horas de media para o primeiro ano, 3 horas o segundo e 2 hora a partir do terceiro. Para o primeiro ano estímase unhas achegas en docencia de **31.763⁸ €**

Investigación:

As instalacións da explotación permitirían a captación de financiamento a través de convocatorias de investigación, estímase unha media para os primeiros tres anos de **25.000€/ano⁹**.

Achegas USC en docencia e investigación: 56.763 €/ano

Cadro resumo Achegas da USC ao proxecto	
A. Proxecto	11.763 €
Redación Proxecto instalacións	6.763 €
Plan de Ordenación da finca	5.000 €
B. Inversión en equipamento	136.500 €
TOTAL INVERSIÓN NO PROXECTO	148.263 €
C. Docencia e Investigación (Inversión anual)	56.763 €

⁸ Ver anexo I

⁹ Considerase a consecución dunha convocatoria de investigación cada dous anos (EIP-Agri, Xunta, Plan Nacional, etc.)

6.2. ASOPORCEL

- ADQUISICIÓN DOS ANIMAIS PARA REPRODUCCIÓN NAS GRANXAS COLABORADORAS NO PROGRAMA DE CONSERVACIÓN DA RAZA PORCO CELTA. Aquí iría incluído o custe dos animais (tomando de referencia táboa publicada na orde do 12 de decembro de 2017 pola que se establecen as bases reguladoras das axudas para paliar os danos producidos polo lobo e se convocan para o ano 2018 (DOG. Nº7 10/01/2018)) que podemos estimar en torno a 12.000 € para iniciar a actividade con animais en idade fértil. Aínda que as cubricións se farían en función das necesidades de animais hai que contar cunha porcentaxe de reposición anual destes efectivos reprodutores.

Tamén habería que engadir o custe de desprazamento e de persoal para visitar estas granxas, seleccionar os exemplares idóneos e facer os chequeos sanitarios necesarios para realizar o movemento entre granxas. Custe aproximado 16.000 €/ANO.

- XESTIÓN, DIRECCIÓN E CONTROL DO PROGRAMA XENÉTICO E DO PROGRAMA SANITARIO DA GRANXA. Os técnicos de ASOPORCEL xestionarían os cruzamentos xenéticos, as extraccións de seme, o tratamento do mesmo no laboratorio, a inseminación das porcas, deteccións de xestacións, selección e descarte dos animais para a reprodución, toma de mostras para xenotipado, desparasitado dos animais, chequeo e vacinado fronte a enfermidade de Aujeszky.... O que supón o aporte dun custe anual medio de **12.500 €**.

Total achegas ASOPORCEL: 40.500 €/ano

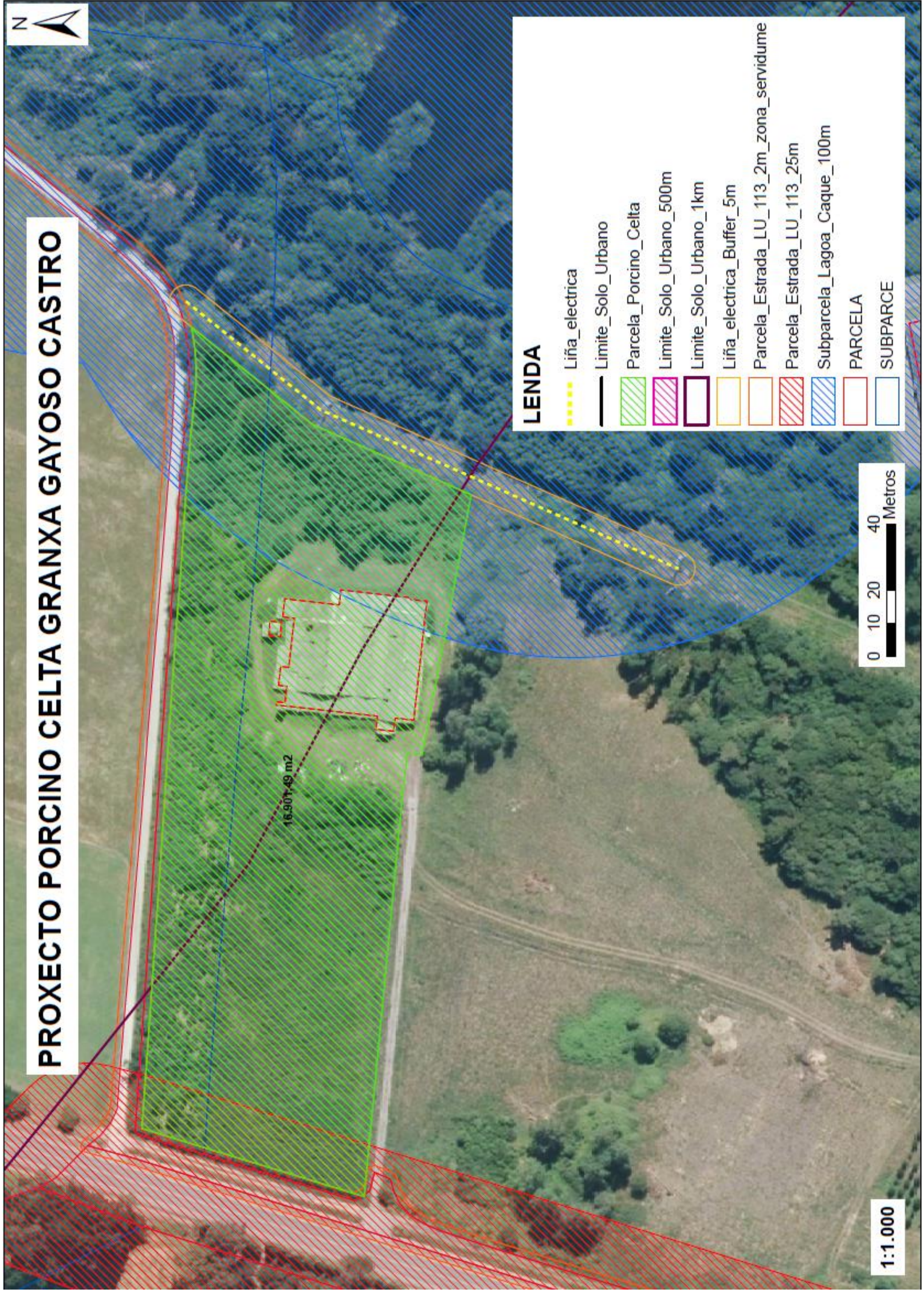
6.3. Deputación Provincial de Lugo

A Deputación Provincial de Lugo asumiría os custes de explotación da granxa, incluíndo o persoal, a alimentación e outros insumos necesarios para o correcto funcionamento da granxa, custes que terán un **retorno a través da venda dos animais**.

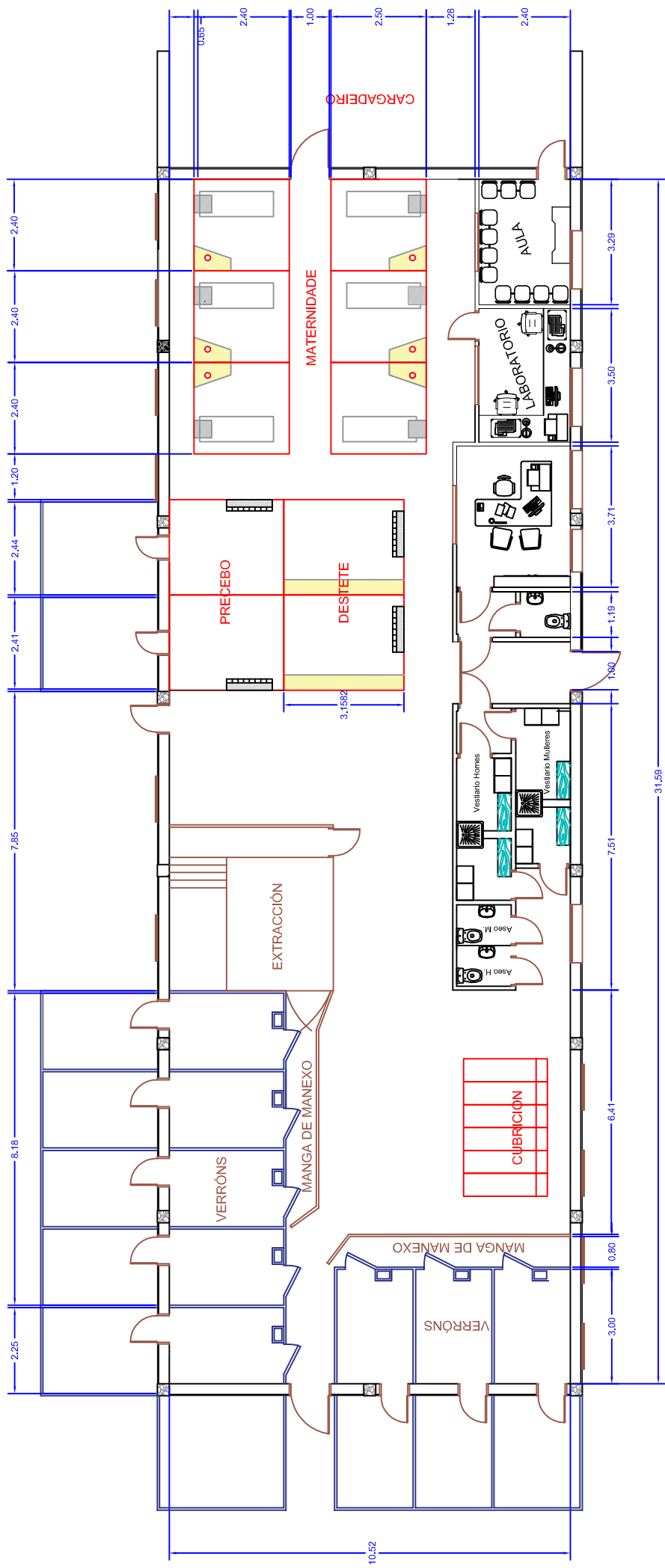
- Persoal: As necesidades de persoal están condicionadas polo sistema de produción en semiextensivo e se limitan á alimentación dos animais, revisión de peches, limpeza e desinfección das instalación e control diario das condicións dos animais, cunha dedicación especial na época de partos e que se cuantifican nunha media de 3 horas diarias ao longo do ano e durante os días laborables. **Total 0,4 UTAs¹⁰**

¹⁰ Unidades de Traballador Activo

PROXECTO PORCINO CELTA GRANXA GAYOSO CASTRO



ANEXO III - Plano distribución da nave



ANEXO IV - Orzamento construción de instalacións e equipamento

PRESUPOSTO

SOLEIRAS E ESTRUCTURA DE FORMIGÓN	18.900,00 €
En formación de fosas baixo o aloxamento e foso para extracción de semen	
CERRAMENTOS E ILLAMENTOS	31.020,00 €
Panel sandwich en cuberta de 40mm poliuretano-aceiro prelacado/PRFV Aillamento en paramentos verticais, poliuretano-PRFV, 40 mm Apertura de novos ocos e peche de ocos actuais Formación de patios de recreo e manga de manexo exterior	
DISTRIBUCIÓN INTERIOR E COMPLEMENTOS	18.190,00 €
Rella de formigón, slat de polipropileno Separacións, frontais e portas en formación de currais e manga de manexo Tolvas, cazoletas e outros complementos Fiestras e entradas de aire de poliuretano Carpintería	
AUTOMATIZACIÓN	5.100,00 €
INSTALACIÓN DE ALMACENAMIENTO E TRATAMIENTO DE AUGA	12.000,00 €
INSTALACION ELÉCTRICA, FONTANERIA E EVACUACIÓN DE XURROS	18.570,00 €
INSTALACIÓN DE CLIMATIZACIÓN	18.400,00 €
Calefacción c/mantas leitóns e ventilación	
SISTEMA DE CONTROL AMBIENTAL	16.700,00 €
Sensores, almacenamento e transmisión de datos	
GAIOLAS DE XESTACIÓN	1.800,00 €
CAMISAS DE PARTOS	4.200,00 €
CABANAS/REFUXIOS EXTERIORES	3.000,00 €
BÁSCULA	2.500,00 €
ASEOS-VESTIARIOS	10.000,00 €
OFICINA-LABORATORIO-AULA	16.000,00 €
TOTAL	176.380,00 €
ESTACIÓN DE ALIMENTACIÓN COMPUTARIZADA	6.000,00 – 12.000,00 €/ud

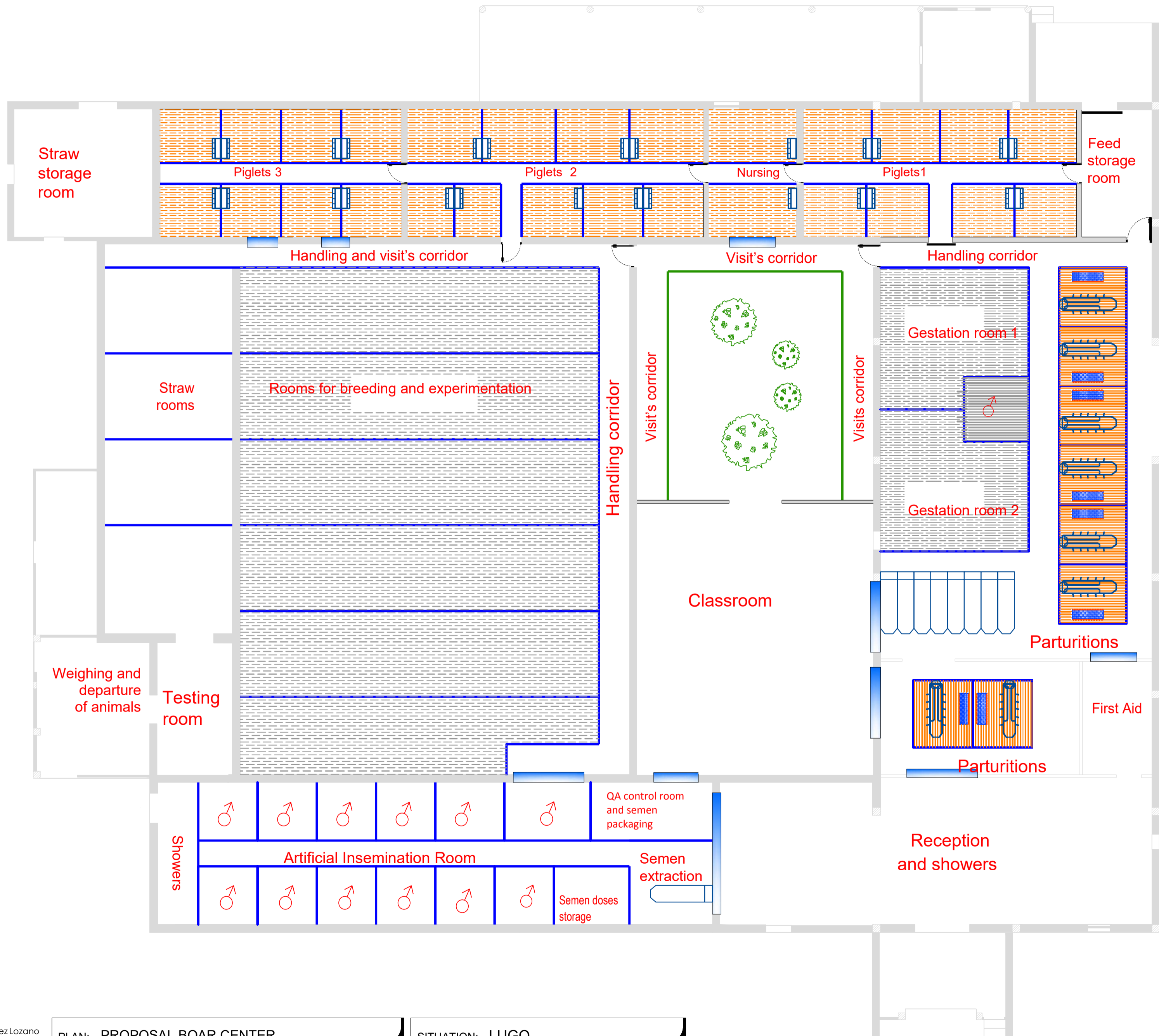
ANEXO V – CADRO RESUMO INVESTIMENTOS

Cadro resumo – investimentos proxecto Granxa Porcino - Gayoso Castro		
		Orzamento
4.3 Instalacións		186.380 €
**	Soleiras e Estrutura	18.900 €
**	Pechamentos e Illamentos	31.020 €
**	Distribución interior	18.190 €
**	Automatización	5.100 €
**	Instalación e tratamento Auga	12.000 €
**	Instalación Eléctrica, Saneam.	18.570 €
**	Instalación Climatización	18.400 €
**	Sist. Control Ambiental	16.700 €
	Gaiolas de Xestación	1.800 €
**	Camisas de partos	4.200 €
	Cabanas/ refuxios exteriores	3.000 €
	Báscula	2.500 €
**	Aseos-Vestiarios	10.000 €
**	Oficina Laboratorio-Aula	16.000 €
	Estación de Alimentación	10.000 €
4.4 Peche perimetral		5.040 €
	1.8 metros	5.040 €
	2.0 metros	6.300 €
4.5 Sistema agroforestal		3.650 €
	Adquisición de árbores	1.350 €
	Reposición de marras	500 €
	Instalación de protectores	240 €
	Labores plantación	1.560 €
4.6 Control dos animais		3.400 €
	Sistema de videovixilancia	3.400 €
4.7 Investimentos opcionais		12.000 €
	Dotación laboratorio e aula	10.000 €
	Paneis explicativos	2.000 €
**Elaboración e exec. do proxecto		10.145 €
	Redación do proxecto (4%)	6.763 €
	Dirección de Obra (4%)	6.763 €
	Coordinación Seg. e Saúde (2%)	3.382 €
		210.470 €
TOTAL	NON inclúe a Redación do Proxecto	220.615 €
ACHEGAS USC DIRECTAS AO PROXECTO		
A. Proxecto		11.763 €
	Redación Proxecto instalacións	6.763 €
	Plan de Ordenación da finca	5.000 €
B. Inversión en equipamento		136.500 €
TOTAL INVERSIÓN DIRECTA USC NO PROXECTO		148.263 €
ACHEGAS ANUAIS DAS PARTES AO PROXECTO		
	USC	56.763 €
	ASOPORCEL	40.500 €
	Deputación de Lugo	Custes explotación

ANEXO VI - CÁLCULO DE COSTES DE DEMOLICIÓN DE LA INCUBADORA DE POLLOS*

UNIDAD	DESCRIPCIÓN	MEDICIÓN	PRECIO	IMPORTE
1	Desmontaje de cobertura de placas de fibrocemento con amianto en cubierta inclinada.	1.703,17	17,43	29.686,32
2	Desmontaje de cobertura de placas de fibrocemento con amianto en falso techo.	955,51	17,09	16.329,67
3	Demolición de muro de fábrica.	306,09	32,41	9.920,30
4	Demolición de pavimento continuo de hormigón.	999,22	7,51	7.504,14
SUMA				63.440,43
		CI (6%)		3.806,43
		PRESUPUESTO DE EJECUCIÓN MATERIAL		67.246,86
		GG (13%)		8.742,09
		BI (6%)		4.034,81
		PRESUPUESTO BASE DE LICITACIÓN		80.023,76
		I/A (21%)		16.804,99
		PRESUPUESTO TOTAL		96.828,75

* Es un cálculo estimativo de los costes puesto que no hay una medición exacta de las construcciones y faltan unidades de obra por contemplar.



Annex 4.7.C

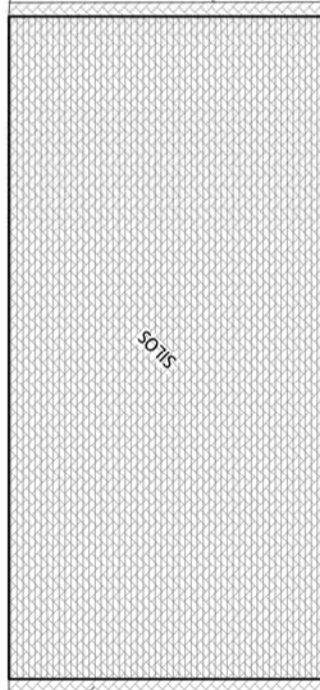
Experimental Teaching Dairy Farm Building Plans

3. PLANOS



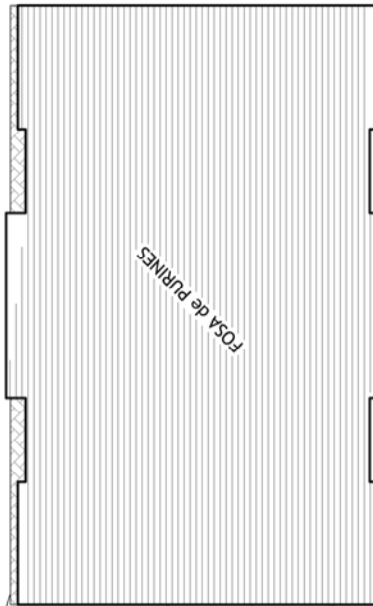
PAVIMENTO
Zahorra Compactada

CUNETA
Hormigón Armado



SOLIS

CUNETA
Hormigón Armado



FOSA de PUÑES



ESTERCOLEÑO

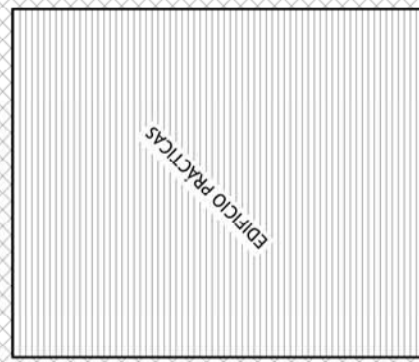
MAE MAQUINARIA



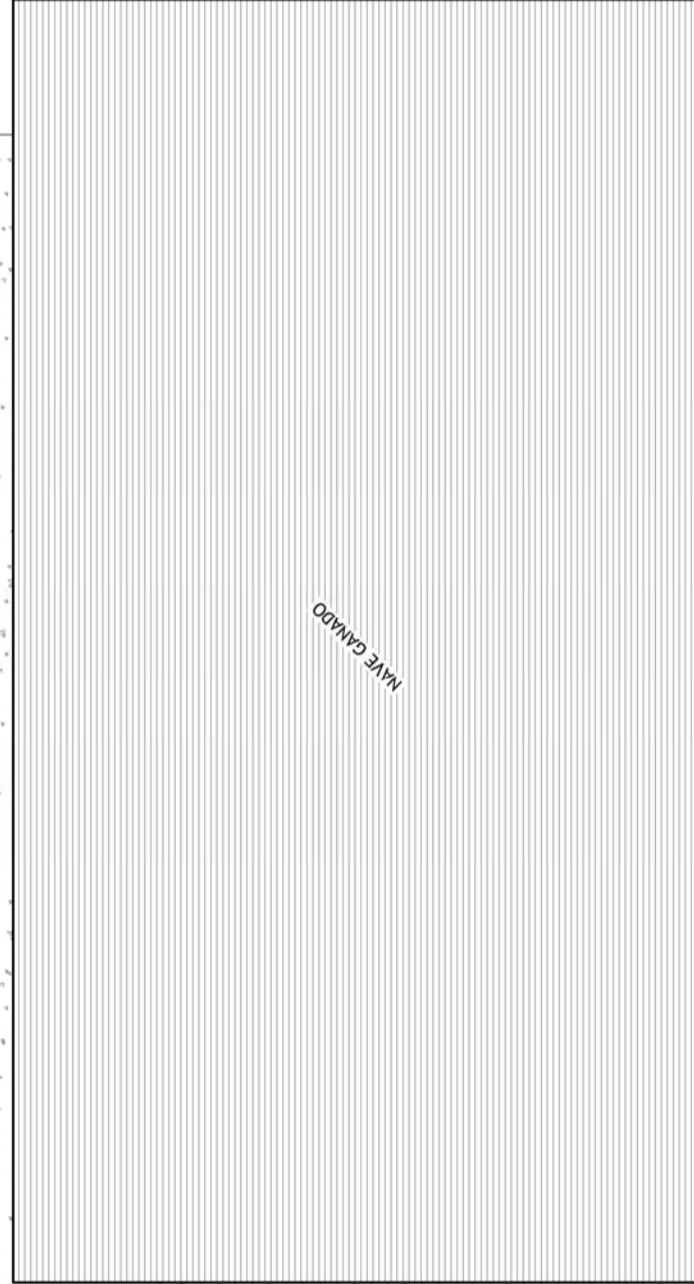
PAVIMENTO
Hormigón Regleado



EDIFICIO PRACTICAS



MAE GANADO



DÁRSENAS
Hormigón Armado



CANAL de PURIN

Promotores:



DEPUTACIÓN PROVINCIAL de LUGO



Proyecto Modificado:

CONSTRUCCIÓN de UNA UNIDAD de LECHE
en la GRANJA GAYOSO CASTRO
- GRANJA EXPERIMENTAL CAMPUS TERRA -
Castro de Ribeiros de Lea, Castro de Rei (Lugo)

Autoría:



MARIO IGLESIAS
Arquitecto



RUBÉN COBAS
Ingeniero Agrónomo



Serie:
URBANIZACIÓN de la PARCELA
Plano:
PAVIMENTACIÓN. PLANTA

Código:
CRdtC9_pe

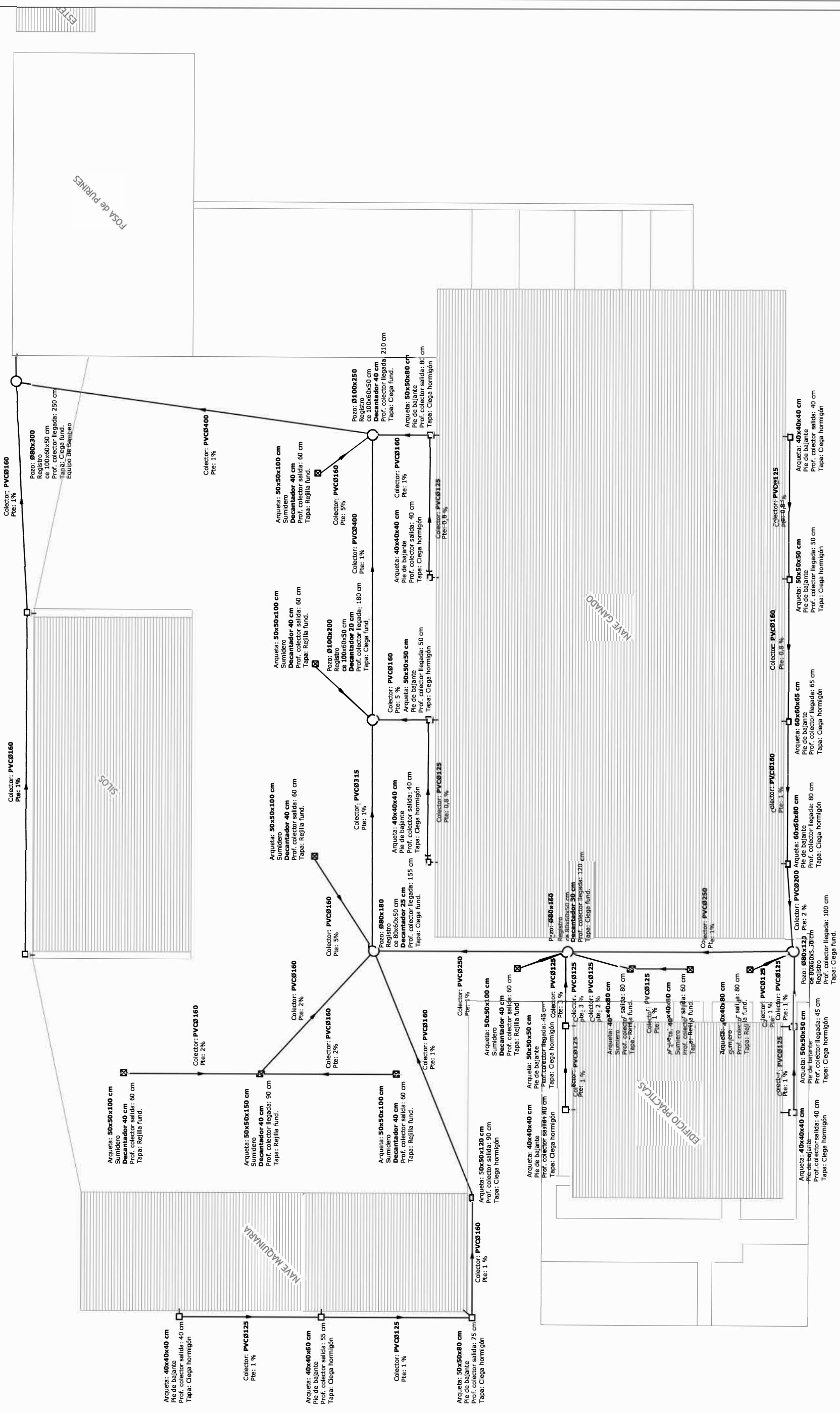
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Mayo 2019



Escalas:
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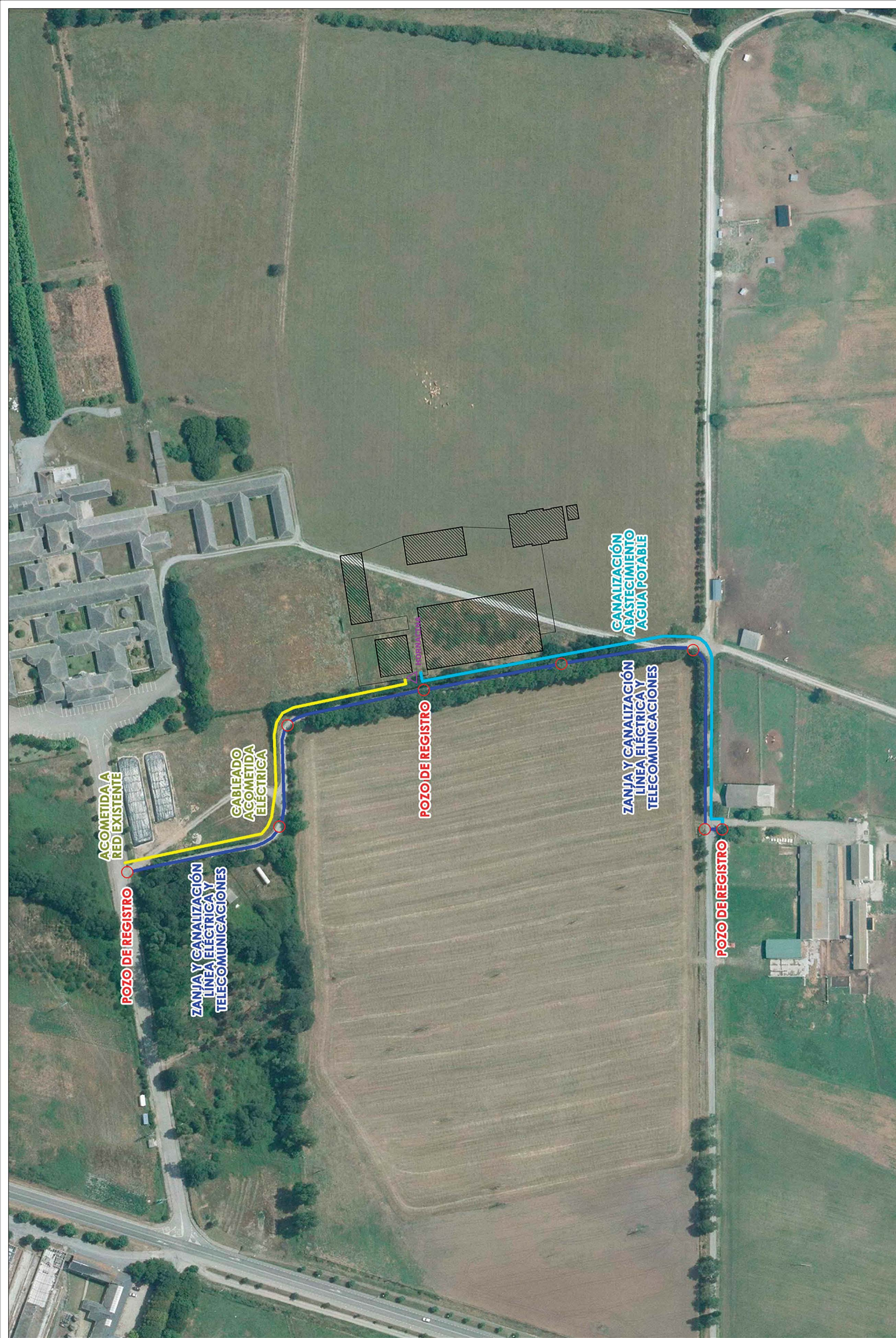
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01.01

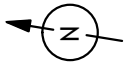


Entrada a Fosa de Purines



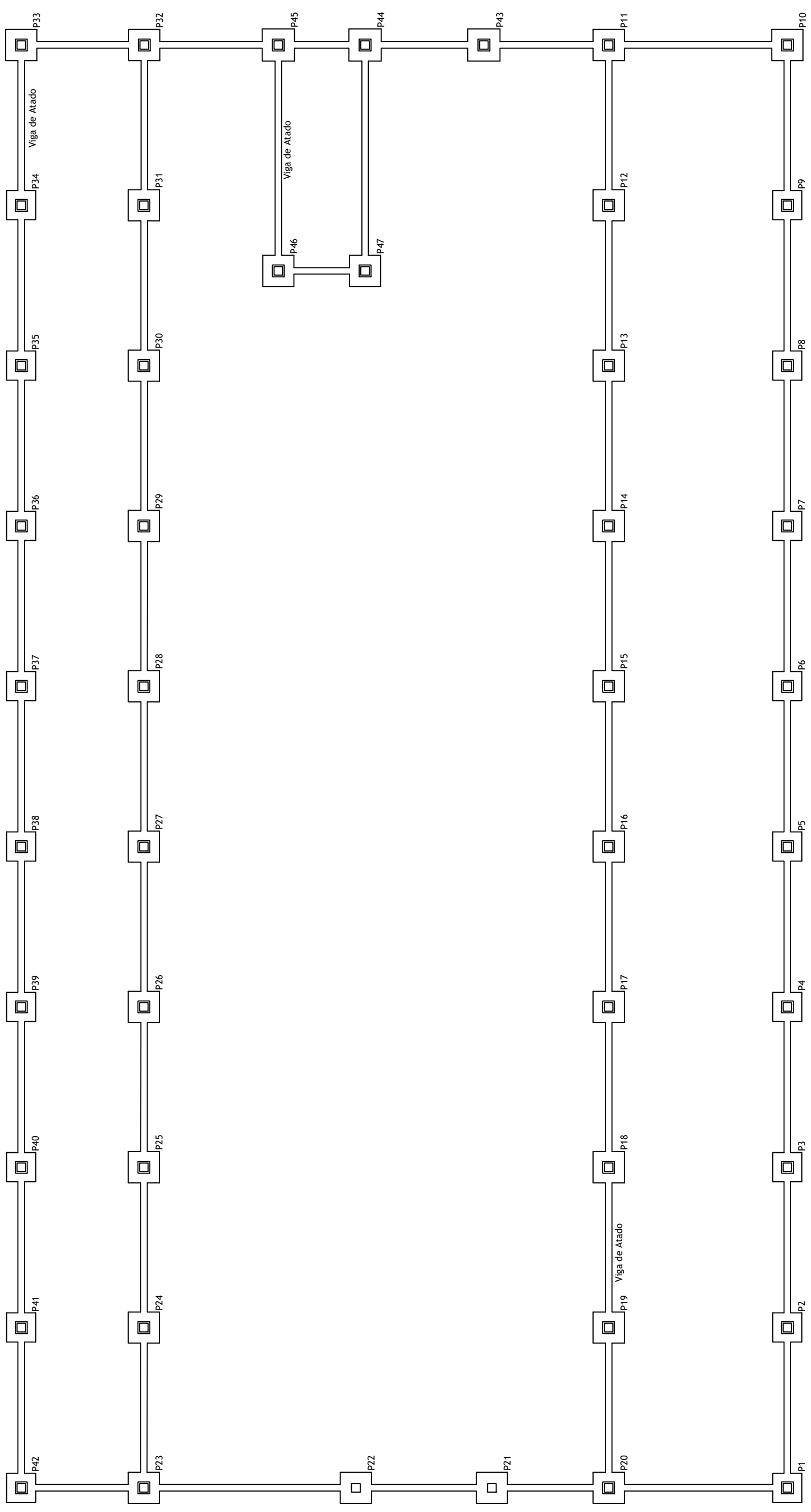
Promotores:  DEPUTACIÓN PROVINCIAL de LUGO	Proyecto Modificado: CONSTRUCCIÓN de UNA UNIDAD de LECHE en la GRANJA GAYOSO CASTRO - GRANJA EXPERIMENTAL CAMPUS TERRA - Castro de Ribeiras de Lea, Castro de Rei (Lugo)	Autoría:  MARIO IGLESÍAS Arquitecto	RUBÉN COBAS Ingeniero Agrónomo	Serie: URBANIZACIÓN de la PARCELA Plano: SANEAMIENTO de PLUVIALES Y LIXIVIADOS. PLANTA	Código: CRDfCY_pe	Fecha: Mayo 2019	Escala: 1:400
					Clave: 01.02	Página 250 de 4191	





PLANTA

Escala 1:200



Promotores:



DEPUTACIÓN PROVINCIAL de LUGO



Proyecto Modificado:

CONSTRUCCIÓN de UNA UNIDAD de LECHE
en la GRANJA GAYOSO CASTRO
- GRANJA EXPERIMENTAL CAMPUS TERRA -
Castro de Ribeiras de Lea, Castro de Rei (Lugo)

Autoría:



MARIO IGLESIAS
Arquitecto

RUBÉN COBAS
Ingeniero Agrónomo

Serie:
NAVE GANADO

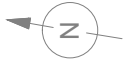
Plano:
ESTRUCTURA. CIMENTACIÓN. PLANTA

Código:
CRatC9_pe

Fecha:
Mayo 2019

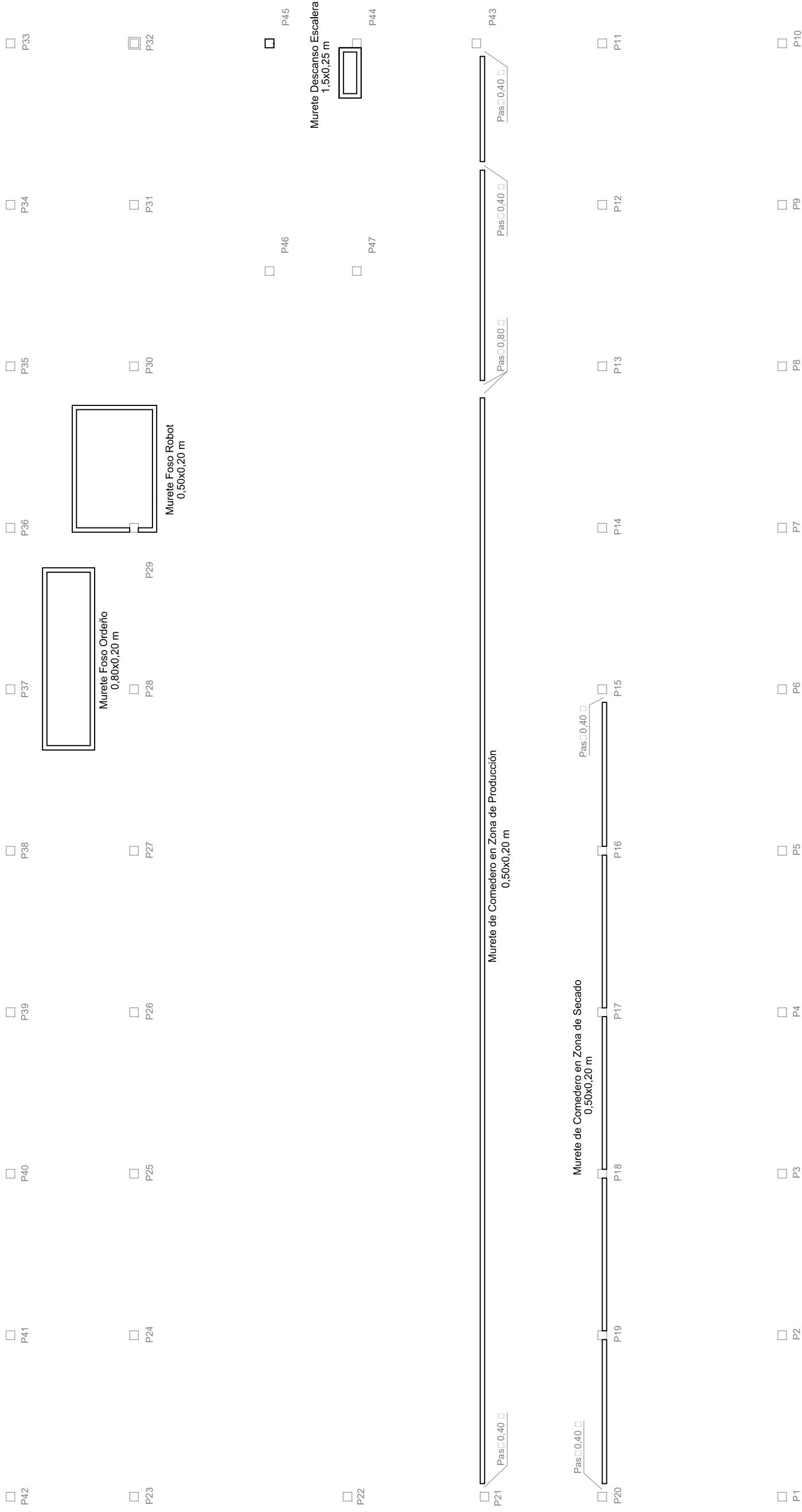
Escala:
1:200

Clave:
02.01
Página 252 de 1191



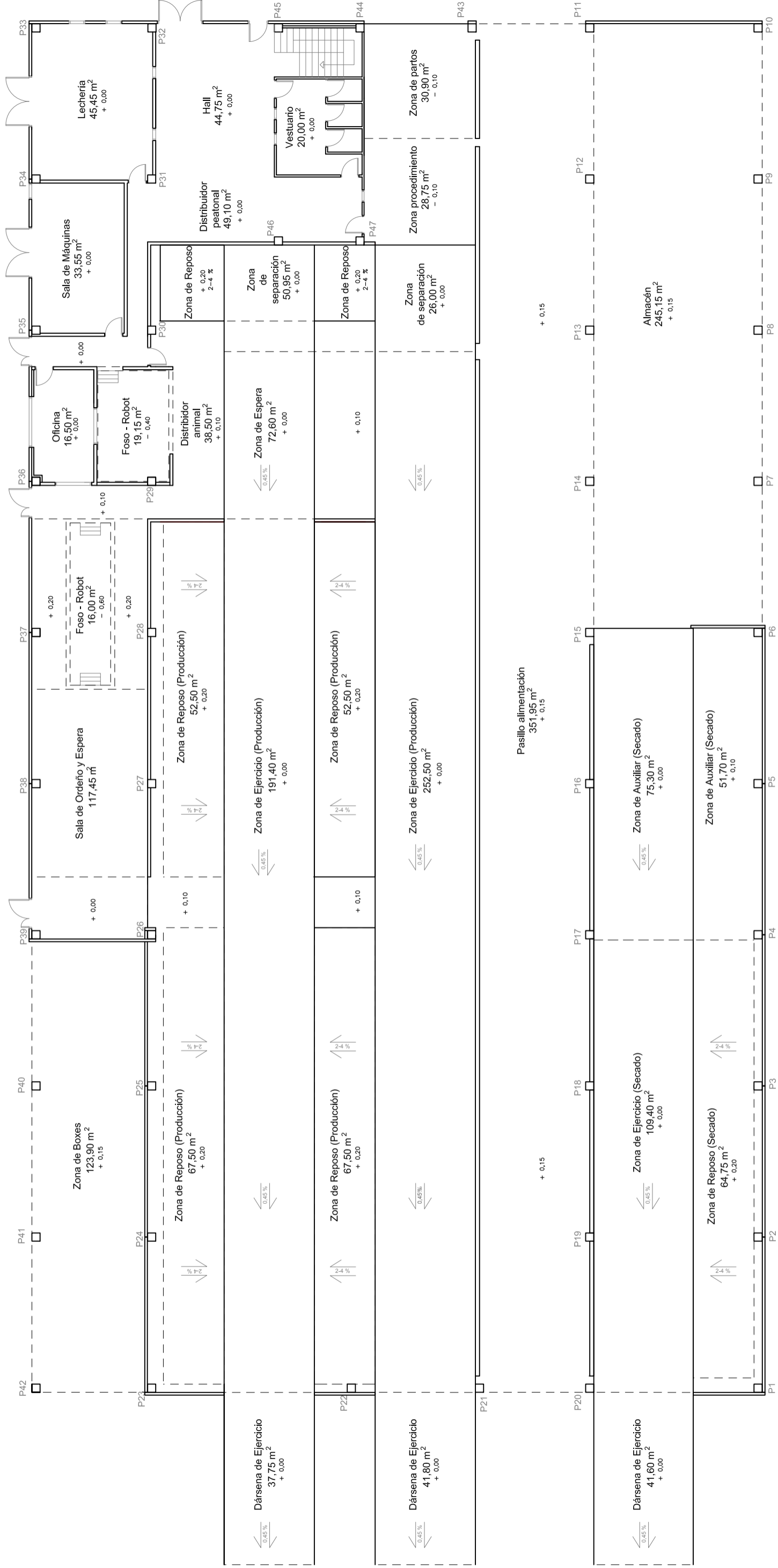
PLANTA

Escala 1:200

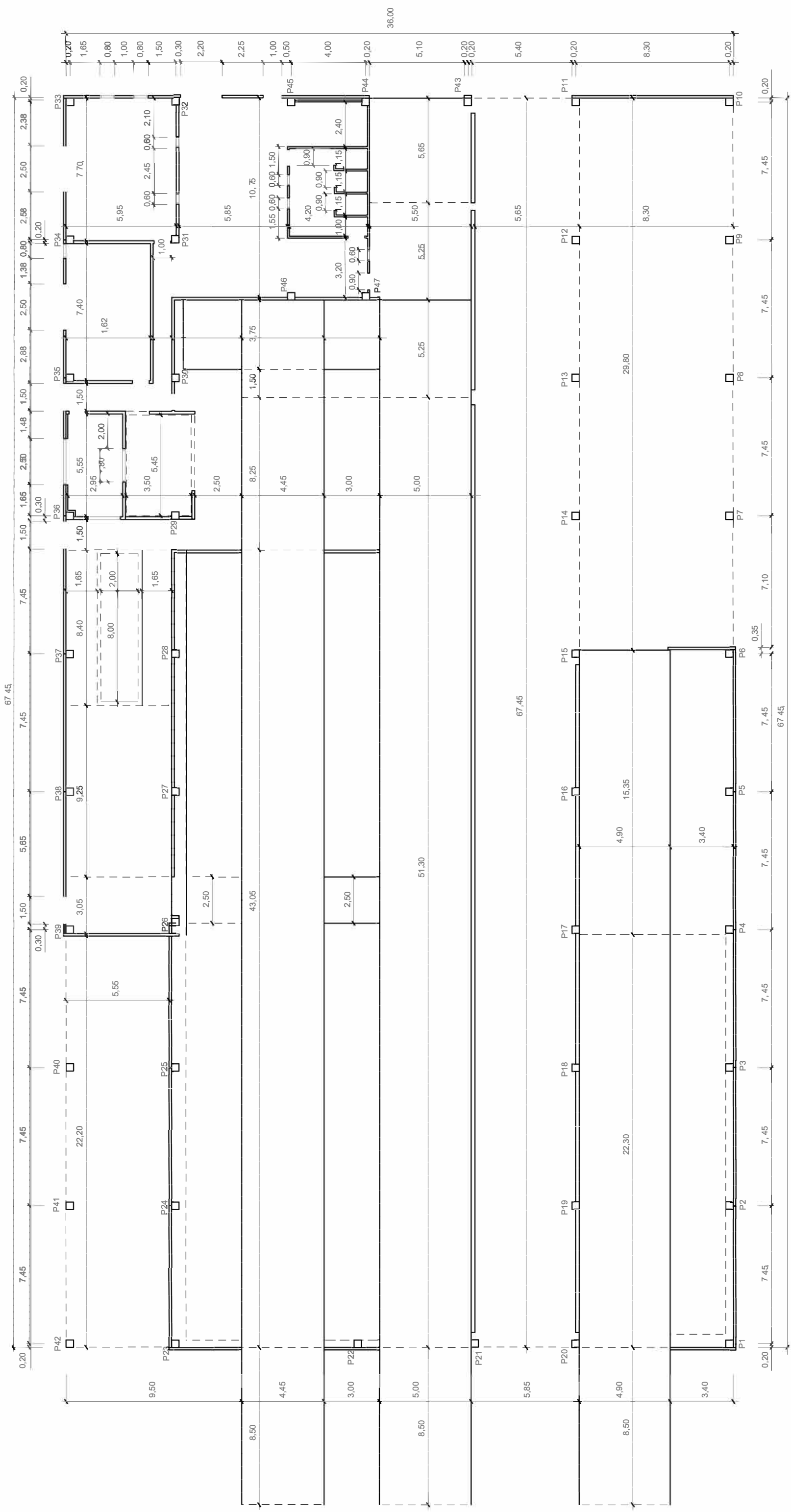


PLANTA BAJA

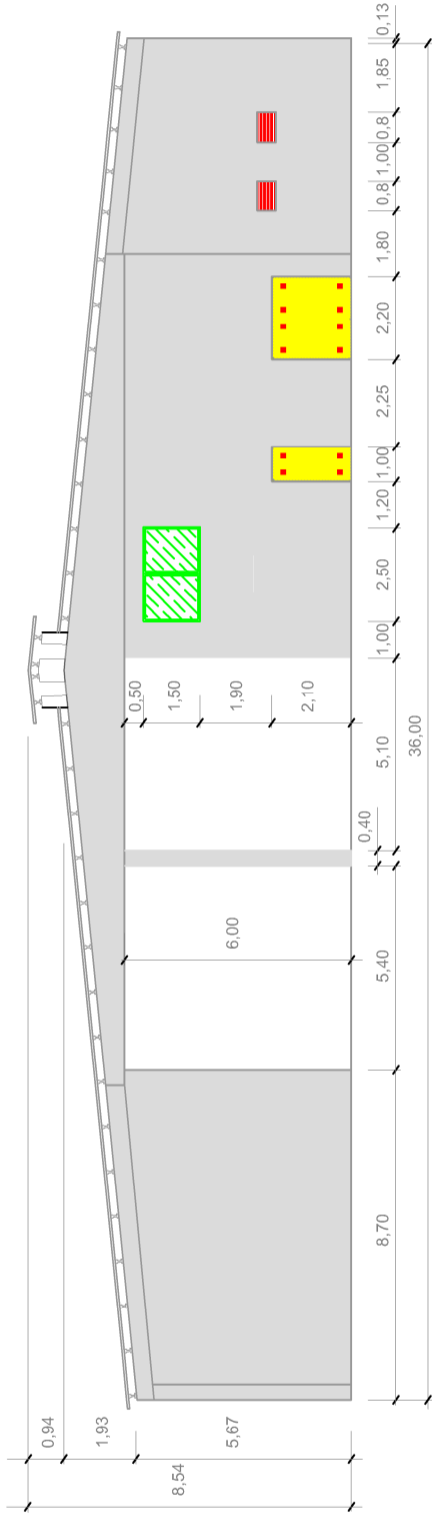
Escala 1:200



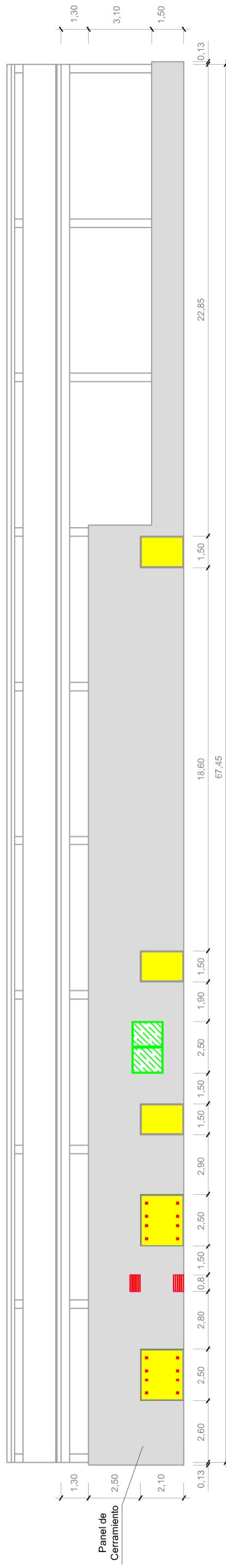
PLANTA BAJA
Escala 1:200



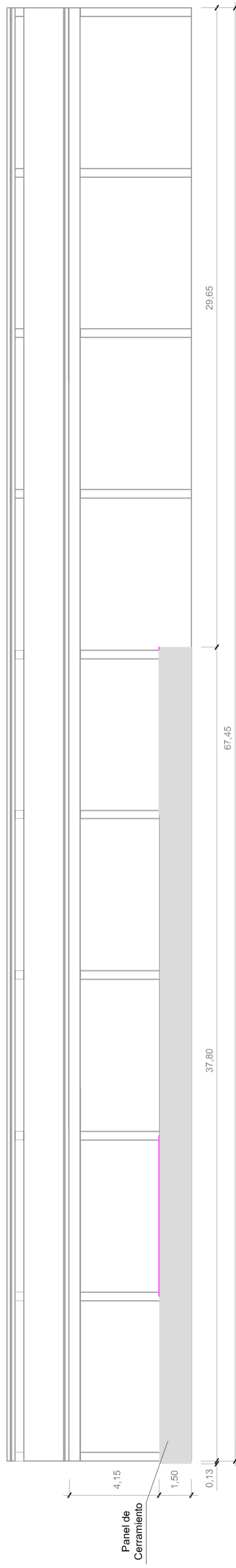
FACHADA NORTE



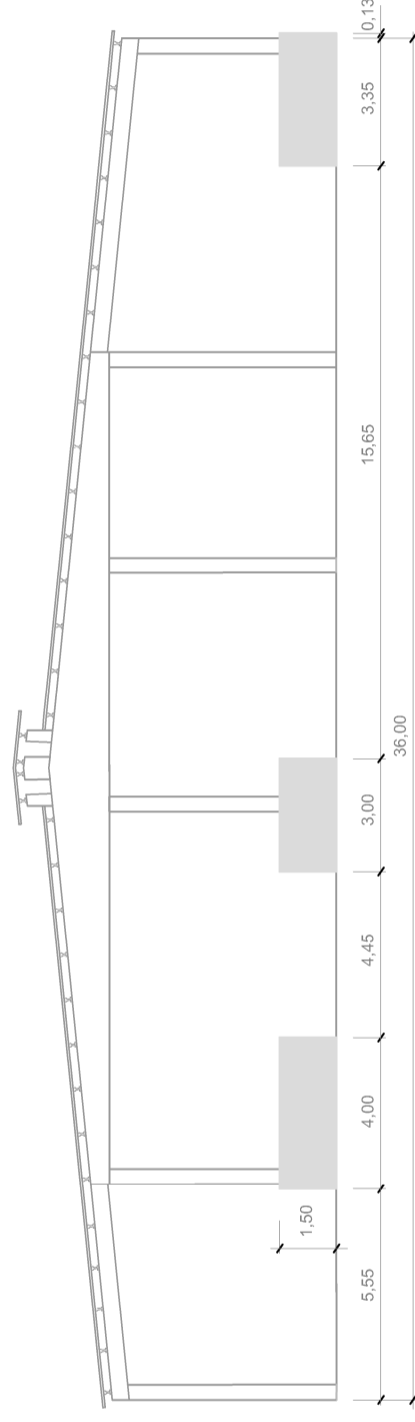
FACHADA OESTE



FACHADA ESTE



FACHADA SUR



Promotores:



DEPUTACIÓN PROVINCIAL DE LUGO



Proyecto Modificado:
CONSTRUCCIÓN de UNA UNIDAD de LECHE
en la GRANJA GAYOSO CASTRO
- GRANJA EXPERIMENTAL CAMPUS TERRA -
Castro de Ribeiros de Lea, Castro de Rei (Lugo)

Autoría:



MARIO IGESIAS
Arquitecto

RUBÉN COBAS
Ingeniero Agrónomo

Serie:
NAVE GANADO

Plano:
FACHADAS. ALZADOS. DESPIECE DEFINITIVO

Código:
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Fecha:
Mayo 2019

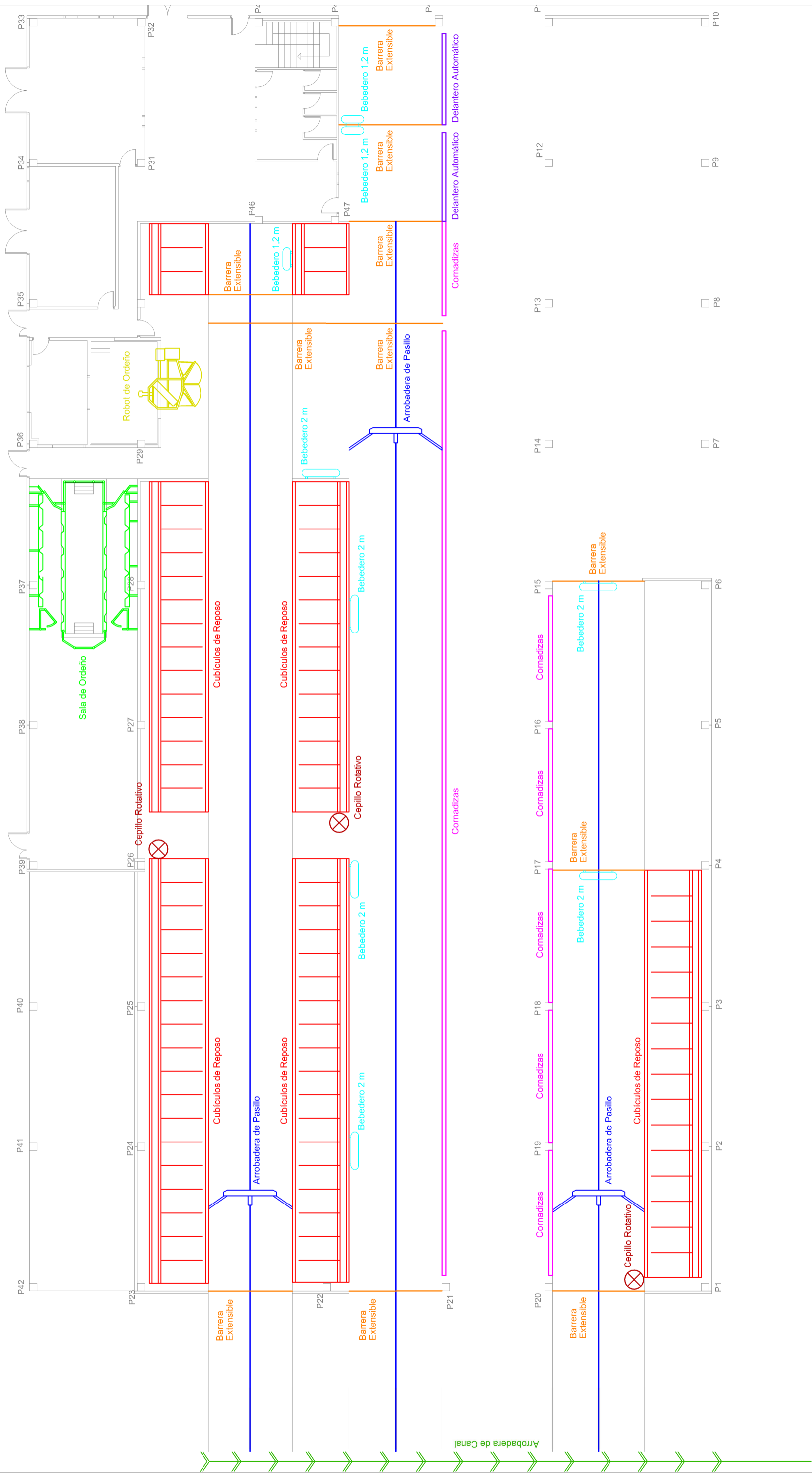
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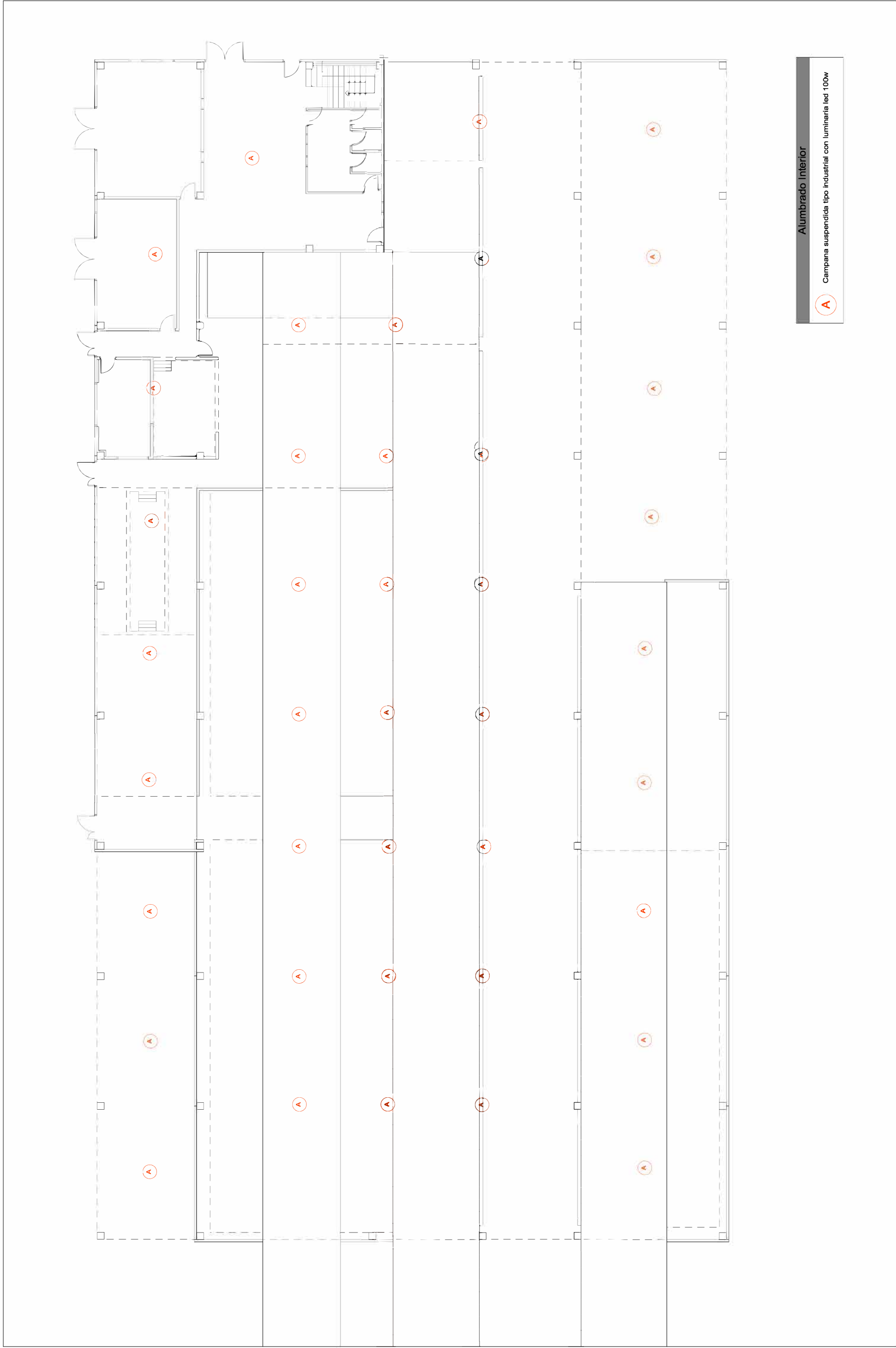
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Página 260 de 1191

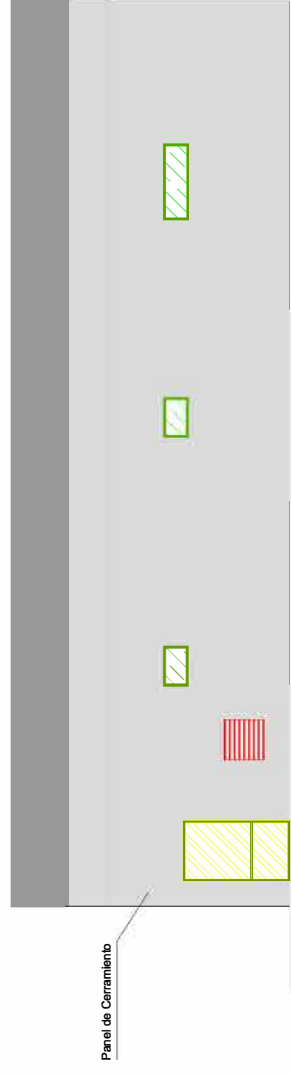
PLANTA

Escala 1:200

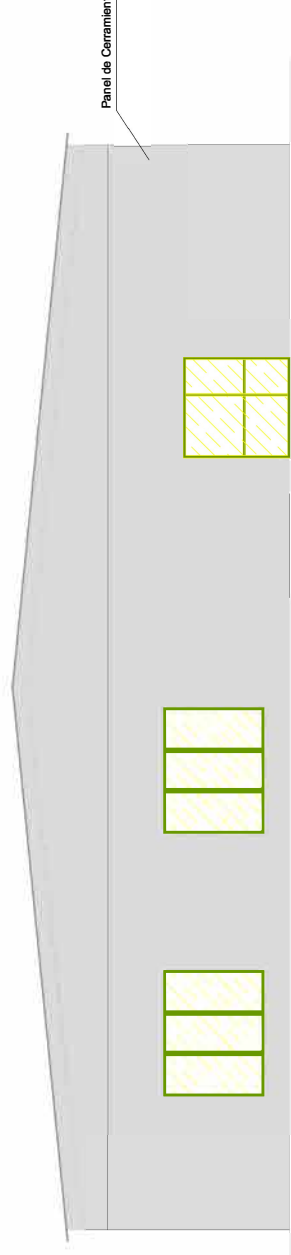




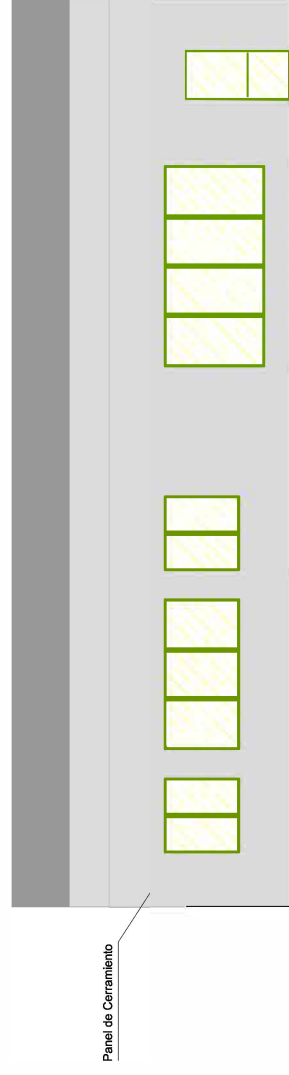
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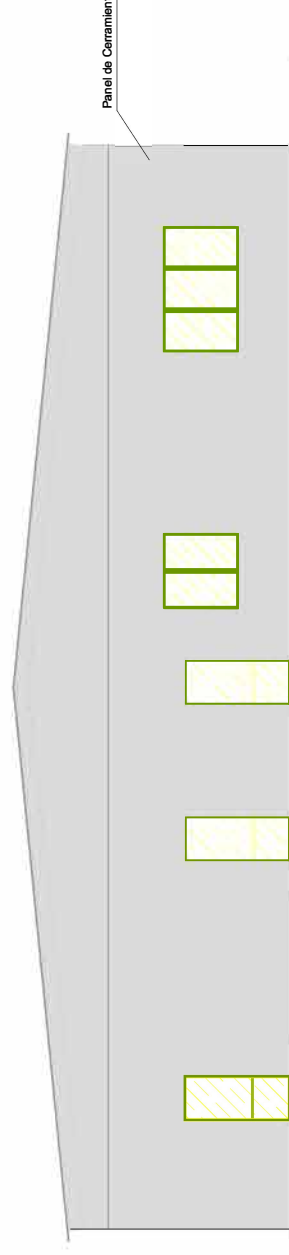
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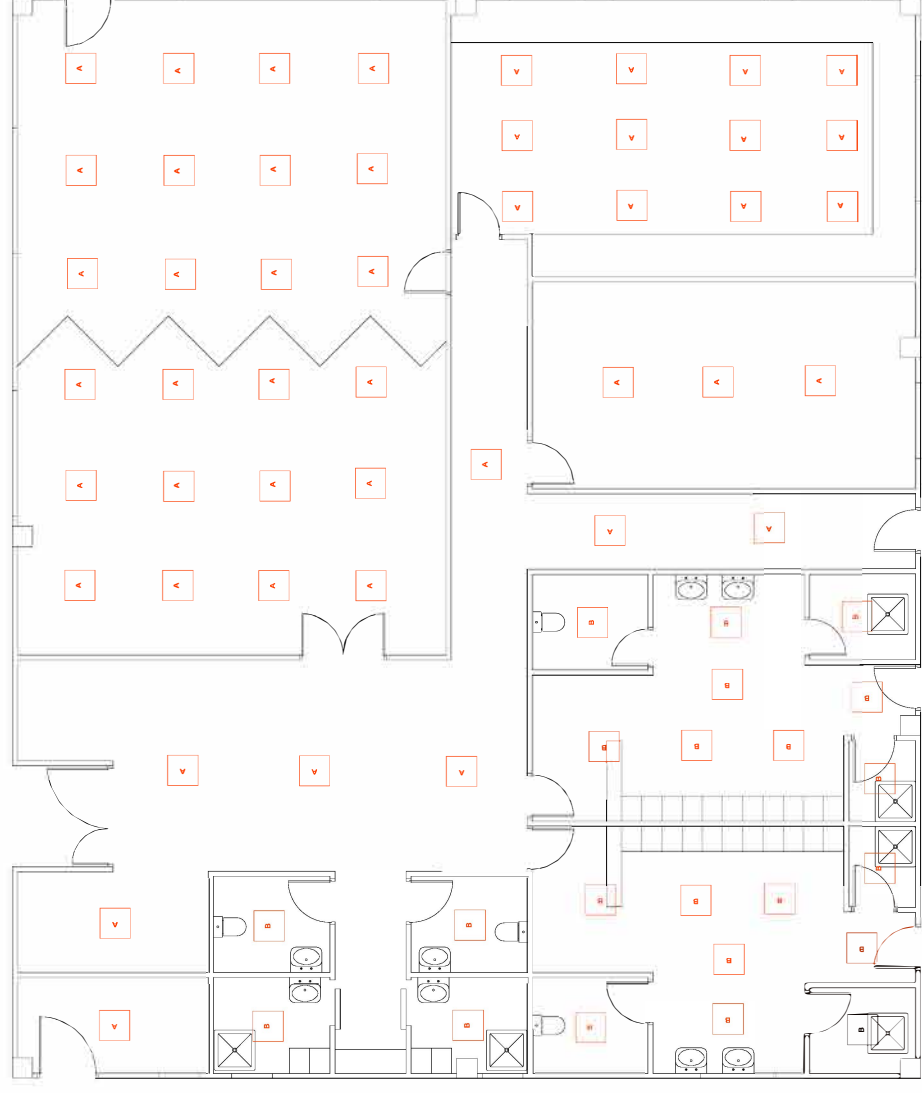
FACHADA NORTE



FACHADA ESTE



FACHADA SUR



Alumbrado Interior	
A	Pantalla empotrada en techo 60x60, luminaria led 36w
B	Pantalla empotrada en techo 60x60, luminaria led 18w

Promotores:



DEPUTACIÓN PROVINCIAL de LUGO



Proyecto Modificado:

CONSTRUCCIÓN de UNA UNIDAD de LECHE
en la GRANJA GAYOSO CASTRO
- GRANJA EXPERIMENTAL CAMPUS TERRA -
Castro de Ribeiros de Lea, Castro de Rei (Lugo)

Autoría:



MARIO IGLESIAS
Arquitecto



RUBÉN COBAS
Ingeniero Agrónomo



Serie:
EDIFICIO PRÁCTICAS

Plano:
ELECTRICIDAD . ALUMBRADO MODIFICADO

Código:

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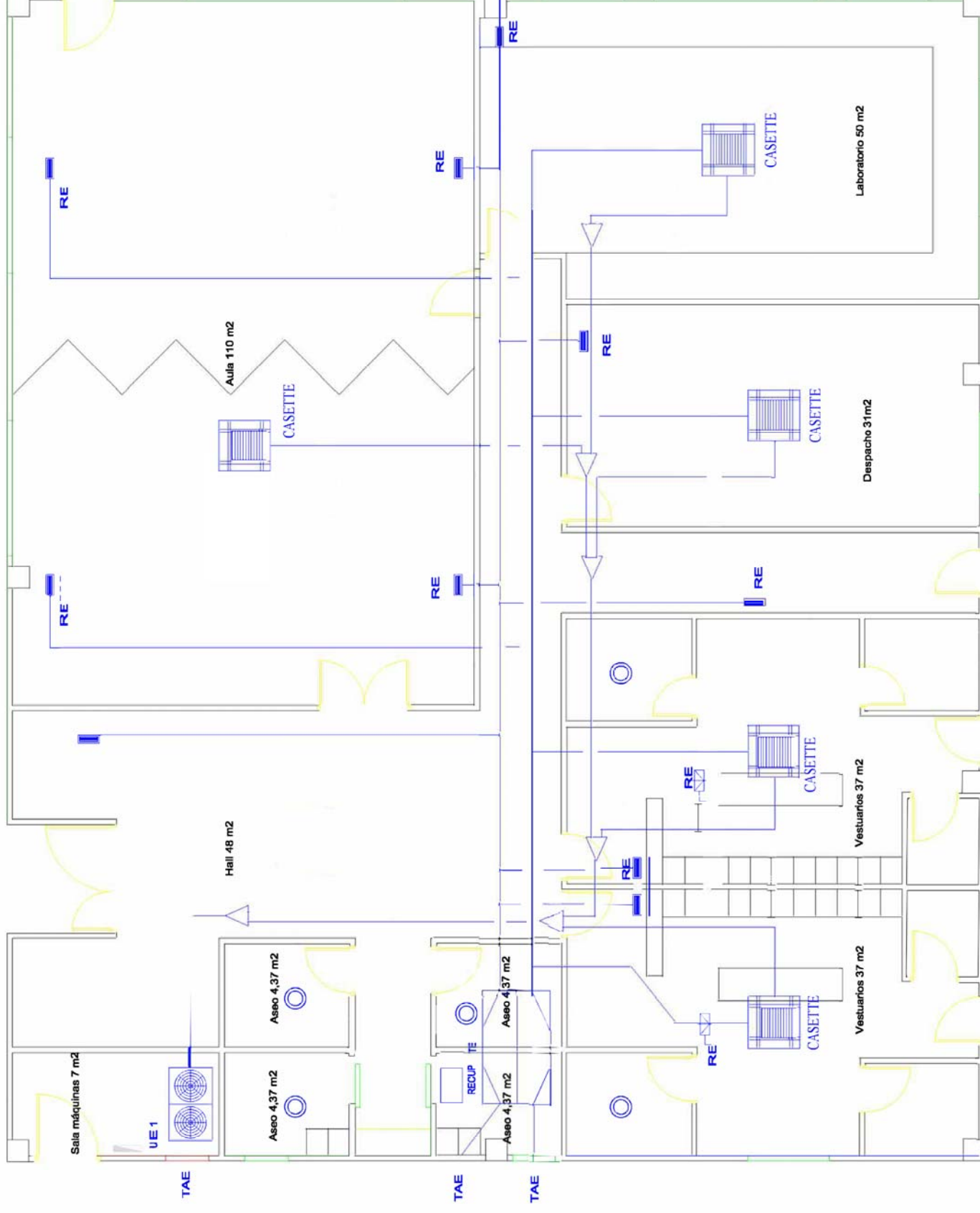
Mayo 2019

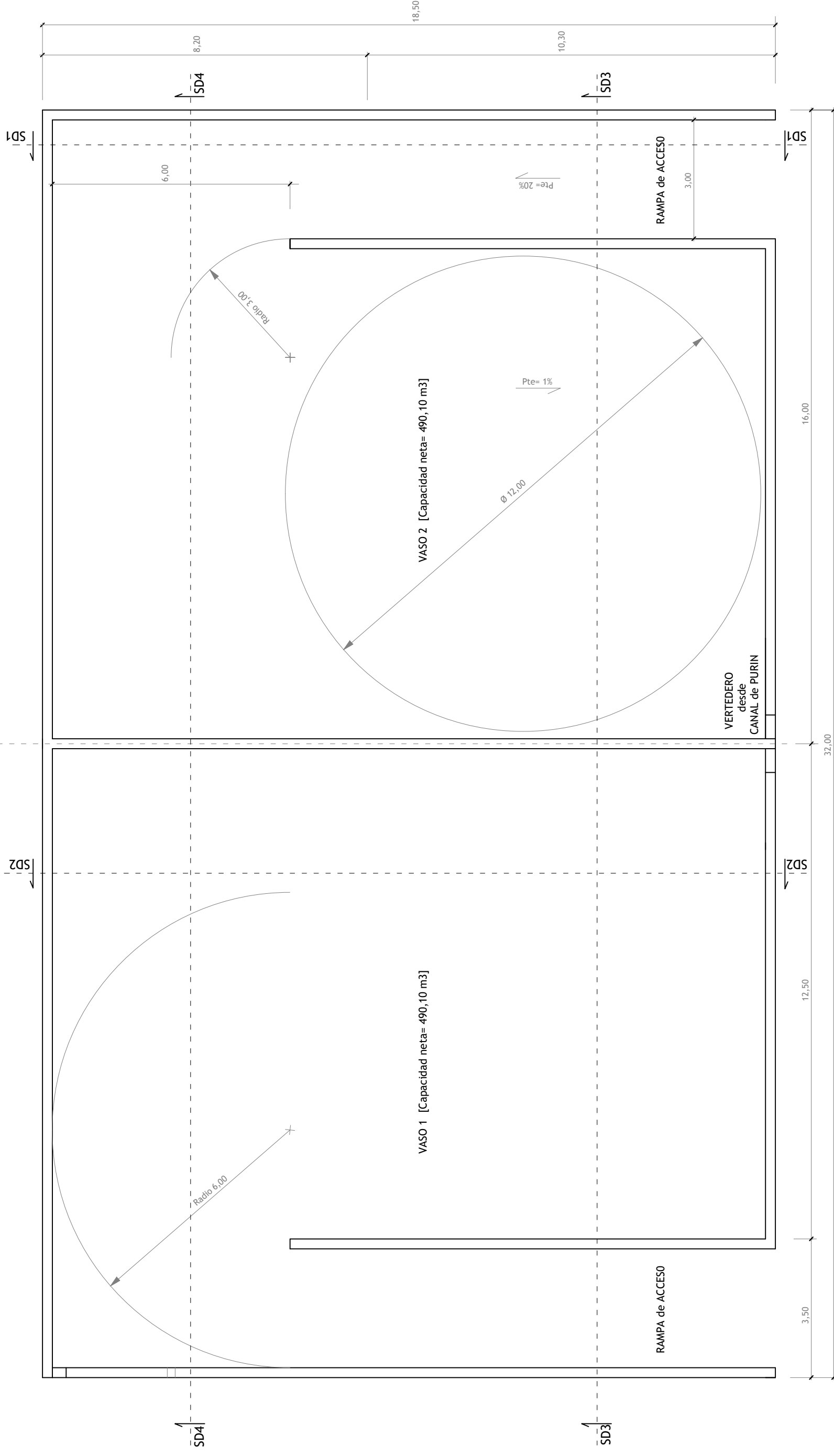
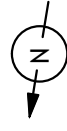
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Clave:

04.06





Promotores:



DEPUTACIÓN PROVINCIAL de LUGO



Proyecto Modificado:

CONSTRUCCIÓN de UNA UNIDAD de LECHE en la GRANJA GAYOSO CASTRO - GRANJA EXPERIMENTAL CAMPUS TERRA - Castro de Ribeiras de Lea, Castro de Rei (Lugo)

Autoría:



MARIO IGLESIAS
Arquitecto

RUBÉN COBAS
Ingeniero Agrónomo

Serie:
FOSA de PURINES

Plano:
DISTRIBUCIÓN. PLANTA

Código:
CRatC9_pe

Fecha:
Mayo 2019

Escala:
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Clave:
05.01
Página 274 de 1191

Annex 5.1

Official agreement USC-GESUGA

CONVENIO DE COLABORACIÓN ENTRE A
UNIVERSIDADE DE SANTIAGO DE COMPOSTELA
E
GESTORA DE SUBPRODUCTOS DE GALICIA, S. L.

Santiago de Compostela, 7 de xuño de 2019

COMPARECEN

Dunha parte, D. Antonio López Díaz, reitor da Universidade de Santiago de Compostela segundo nomeamento efectuado polo Decreto 57/2018, do 31 de maio (DOG do 5 de xuño), actuando en nome e representación da mesma en virtude dos poderes outorgados polo artigo 20 da Lei Orgánica 6/2001, do 21 de decembro de Universidades, e do artigo 82 do Decreto 14/2014, do 30 de xaneiro, polo que se aproban os Estatutos da Universidade de Santiago de Compostela, con CIF Q1518001A e sede social no Colexio de San Xerome, Praza do Obradoiro s/n, CP 15782 de Santiago de Compostela

Doutra, D^a Marianela Rodríguez Ferreiroa con DNI 32658819S, xerenta de GESTORA DE SUBPRODUCTOS DE GALICIA, S.L. (en adiante GESUGA), actuando no seu Nome e representación, con CIF B15862667, e domicilio social en Lg. de Areosa, s/n, Queixas, 15185 Cerceda, A Coruña.

As partes comparecentes recoñécense mutuamente a capacidade xurídica e de representación necesaria para obrigarse nos termos do presente convenio, e a tal efecto,

EXPOÑEN

PRIMEIRO.- Que a USC é unha entidade de dereito público que desenvolve actividades de formación, investigación e desenvolvemento científico e tecnolóxico, interesada en colaborar



cos sectores socioeconómicos para asegurar un dos fins da formación e a investigación, que é a innovación e a modernización do sistema produtivo.

SEGUNDO.- Que, segundo o artigo 4 dos Estatutos da USC, para o mellor desenvolvemento das súas funcións, a Universidade de Santiago de Compostela propiciará o establecemento de relacións con outras Universidades, organizacións e institucións, moi en particular coas de carácter académico, científico e cultural.

TERCEIRO.- Que a UNIVERSIDADE DE SANTIAGO DE COMPOSTELA ten interese en incrementar o número de necropsias en animais domésticos en Anatomía Patolóxica da Facultade de Veterinaria de Lugo, para cumprir os indicadores que a EAEVE (European Association of Establishments of Veterinary Education) establece como o número mínimo de necropsias docentes que permitan garantir a formación dos/as estudantes do Grao en Veterinaria da USC.

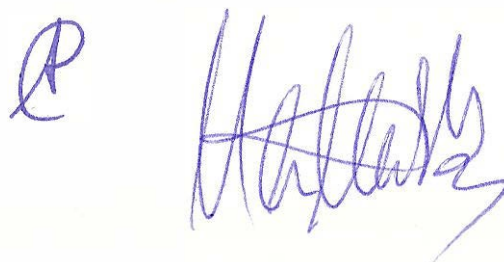
CUARTO.- A Universidade de Santiago de Compostela-Facultade de Veterinaria de Lugo está recoñecida como establecemento SANDACH co nº de rexistro S.27.028.023, e unha das actividades para as que ten autorización é como “Usuario específico de subprodutos con fins de diagnóstico, educación e investigación” (ANEXO I última modificación da actividade como Establecemento SANDACH solicitada en maio de 2015).

QUINTO.- Que GESUGA é unha sociedade dedicada, fundamentalmente, á xestión dos cadáveres dos animais procedentes das explotacións gandeiras de Galicia.

SEXTO.- GESUGA está recoñecida como establecemento SANDACH co nº de rexistro S.15.024.001, e conta con autorización para as actividades de “Transporte de Subprodutos Cárnicos non destinados ao consumo humano”; “Planta de transformación de categoría 1” e “Planta de transformación de categoría 2”.

GESUGA conta, ademais, coa autorización SANDACH co nº de rexistro S.27.039.003 para a “Planta Intermedia de Categoría 2” situada no Parque Empresarial da Matela, Parcela S-1 – A Matela, 27150 Outeiro de Rei, Lugo.

A subscrición deste convenio mellora a eficiencia da xestión pública, contribúe á realización de actividades de utilidade pública, establecendo instrumentos colaborativos a fin de lograr os fins institucionais de cada unha das institucións, co entendemento de que é a canle para lograr un obxectivo e fins propios de formación e a translación de coñecementos á sociedade. Este convenio, co contido previsto no artigo 49 da Lei 40/2015, de 1 de outubro, enmarcase no tipo previsto no artigo 47.2c) da Lei 40/2015, de 1 de outubro.



E con base en tales antecedentes ambas institucións consideran oportuno establecer un convenio de colaboración con arranxo ás seguintes:

CLÁUSULAS

PRIMEIRA.- OBXECTO

O obxecto deste convenio é regular a colaboración entre GESUGA e a Universidade de Santiago de Compostela co fin de que os cadáveres de équidos e de outras especies animais de interese que xestiona GESUGA poidan servir para que a Facultade de Veterinaria incremente o número de necropsias en anatomía patolóxica, no marco das prácticas do título de Grao en Veterinaria da USC.

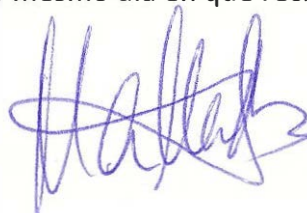
SEGUNDA.- COMPROMISOS DAS PARTES

1. GESUGA comprométese a:

- Poñer a disposición da USC cadáveres de équidos, retirados en explotacións gandeiras, e outras especies animais que teña na súa planta intermedia de Outeiro de Rei, que poidan ser de interese para a realización de necropsias na Facultade de Veterinaria da USC.
- Conseguir, dos propietarios das explotacións, as autorizacións para que a Facultade de Veterinaria da USC poida realizar as necropsias aos cadáveres.
- Avisar á USC cando teña dispoñibilidade de cadáveres, que non amosen signos de autólise e/ou putrefacción avanzada, na súa planta de Outeiro de Rei.
- Ter os cadáveres na Planta Intermedia de Categoría 2 de Outeiro de Rei en Lugo para que a USC poida recollelos no mesmo día en que sexa avisada.
- Facerse cargo dos restos dos cadáveres na Facultade de Veterinaria, unha vez realizadas as necropsias, nun prazo máximo de 48 horas.
- Recoller a documentación destes animais para o seu envío á administración para a tramitación de baixa do animal.
- Realizar todos os rexistros de entradas e saídas na páxina SANDACH habilitada no MAGRAMA, así como nos libros de rexistros da entidade.

2. A USC comprométese a:

- Recoller os cadáveres necesarios, que teñan utilidade docente, nos dous períodos docentes do primeiro e segundo semestre de cada curso académico (Setembro a decembro e febreiro a maio respectivamente).
- Recoller os cadáveres na Planta Intermedia de Categoría 2 de Outeiro de Rei entre as 14.00 horas e as 19:00 horas do mesmo día en que reciba o aviso.



Se non pode recoller os cadáveres, ou se xa cumpriu os indicadores de necropsias e non considera necesario facerse cargo dos mesmos, comunicará a GESUGA no mesmo día do aviso, e antes das 19:00 horas, que non se fai cargo da recollida.

- Comunicar a GESUGA que xa rematou as necropsias para que poida facerse cargo da retirada dos restos.
- Manter os restos dos subprodutos refrixerados ata a súa retirada por parte de GESUGA.
- Asumir con medios propios a recollida e transporte dos cadáveres dende a Planta Intermedia de Outeiro de Rei á Facultade de Veterinaria.
- Que unha vez realizadas as necropsias, facerse cargo dos custos derivados do transporte da retirada dos restos dende a Facultade de Veterinaria ata a Planta Intermedia de Categoría 2 en Outeiro de Rei.
- Enviar á administración a documentación correspondente das entradas e saídas dos cadáveres desde e ata a Planta Intermedia de categoría 2 de Outeiro de Rei, Lugo, de GESUGA para que esta leve a cabo o seu rexistro na páxina SANDACH habilitada no MAGRAMA.

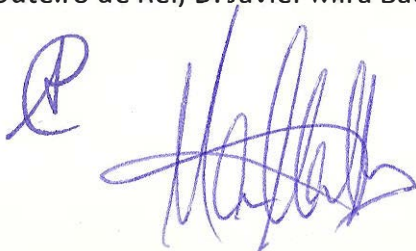
TERCEIRA.- PERMISOS

Cada unha das partes deberá encargarse de obter e manter vixentes os permisos e autorizacións necesarias para facer efectivos os compromisos asumidos neste convenio cumprindo cos requirimentos da normativa vixente.

CUARTA.- COMISIÓN DE SEGUIMIENTO

Tendo en conta o establecido no artigo 49.f da Lei 40/2015, do RXSP, para o bo desenvolvemento das actividades obxecto deste convenio, seguimento, vixilancia e control establecerase unha Comisión Mixta, de composición paritaria, integrada por dous representantes de cada unha das entidades que resolverá os problemas de interpretación e cumprimento que poidan xurdir respecto do presente convenio. A Comisión Mixta de seguimento estará integrada por dúas persoas en representación da USC e dúas en representación de GESUGA:

- En representación da USC actuarán o/a decano/a da Facultade de Veterinaria e o/a director/a do Departamento de Anatomía, Producción Animal e Ciencias Clínicas Veterinarias.
- En representación de GESUGA actuarán a xerente de GESUGA e o encargado da xestión da planta intermedia de Outeiro de Rei, D. Javier Mira Bao.



Ostentará a Presidencia da comisión de seguimento o/a decano/a da Facultade de Veterinaria.

Os membros da Comisión poderán delegar a súa representación e voto noutra persoa da súa mesma organización. Poderán asistir á Comisión como invitados, con voz pero sen voto, aquelas persoas que en cada momento se considere necesario.

A Comisión Mixta de seguimento reunirse como mínimo unha vez ao ano, no inicio do curso, ou cando o solicite algunha das partes.

QUINTA.- PUBLICIDADE

A información contida no presente convenio poderá ser obxecto de publicidade nos termos establecidos no artigo 8.1.b) da Lei 19/2013, de 9 de decembro, de Transparencia, Acceso á Información Pública e Bo Goberno (BOE 10/12/2013).

SEXTA.- IMAXE CORPORATIVA

As partes poderán facer constar a presente colaboración sen que isto supoña autorización de uso da imaxe corporativa para un fin diferente ao das actividades reguladas no convenio sendo, en todo caso, necesaria a autorización expresa da USC para facer uso do seu logotipo por calquera medio de difusión.

SÉTIMA.- ENTRADA EN VIGOR E DURACIÓN

O presente convenio xurdirá efecto a partir da data da súa sinatura e a súa vixencia será de catro anos.

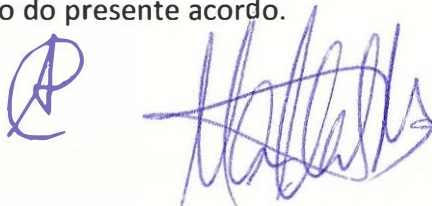
Antes da súa finalización, os asinantes, a través da Comisión Mixta de seguimento, poderán acordar a prórroga deste convenio por un período de 4 anos, que será subscripta polos representantes legais das dúas entidades.

OITAVA.- MODIFICACIÓN E RESCISIÓN

As partes poderán modificar ou denunciar o presente convenio en calquera momento por mutuo acordo. Calquera delas poderá, á súa vez, denunciar o convenio comunicándoo por escrito á outra parte con 3 meses de antelación á data na que o vaia dar por rematado.

NOVENA.- XURISDICIÓN

GESUGA e a USC comprométense a resolver de xeito amigable calquera desacordo que poida xurdir no desenvolvemento do presente acordo.



No seu caso, as partes someterán as diverxencias que se puideran presentar en orde á interpretación ou cumprimento do presente Convenio aos Xulgados da orde xurisdiccional do contencioso-administrativo, dado o carácter público da USC.

E, en proba de conformidade con canto antecede, asinan no lugar e data indicados.

Pola Universidade de Santiago de Compostela

O reitor



Antonio López Díaz

Por GESUGA

A xerenta



Marianela Rodríguez Ferreiroa

Annex 5.2.A

Agreements between HVURC and horse breeding farms

COMPROMISO DE SINATURA DE CONVENIO DE COLABORACIÓN ENTRE A FUNDACIÓN ROF CODINA E GALECER GALICIA, S.L.

En Lugo, a 10 de xullo de 2019

REUNIDOS

Dunha parte don Luis Felipe de la Cruz Palomino, actuando en calidade de director xerente da FUNDACIÓN ROF CODINA, que ten o seu domicilio na cidade de Lugo, no Campus Universitario, Estrada da Granxa, 51; atopándose inscrita no Rexistro de Fundacións de Interese Galego e no censo de Entidades Xurídicas do Ministerio de Economía y Hacienda co C.I.F. G27182856.

Doutra parte, don Javier González Fraga, con DNI: 35324416G actuando en calidade de representante de GALECER GALICIA, S.L. con NIF: B70369152, empresa xestora da granxa equina con REGA ES150800099601 e enderezo en Marco das Pías, 3, 15815 Sobrado dos Monxes (A Coruña)

EXPOÑEN

Primeiro.

Que GALECER GALICIA, S.L. ten interese en que se desenvolvan nas súas instalacións actividades docentes, de investigación e de prestación de servizos por parte do alumnado da Facultade de Veterinaria, así como por persoal en formación da Fundación Rof Codina.

Que GALECER GALICIA, S.L. ten interese en por os animais da súa propiedade a disposición do HVU-RC e da Facultade de Veterinaria para o desenvolvemento de actividades con obxectivos comúns.

Segundo.

Que a FUNDACIÓN ROF CODINA é unha organización establecida sen ánimo de lucro, de carácter fundacional, con personalidade xurídica propia e plena capacidade de obrar, podendo realizar todos aqueles actos que sexan necesarios para o cumprimento da finalidade

para a que foi creada, con suxeición ao establecido no ordenamento xurídico. Réxese pola Carta Fundacional e os seus Estatutos, administrando os bens mobles e inmoables que constitúen o denominado Hospital Veterinario Universitario Rof Codina (HVU-RC) e o denominado Centro de Biomedicina e Veterinaria (CEBIOVET).

Que a FUNDACIÓN ROF CODINA ten, entre os seus obxectivos, a colaboración coa docencia, a prestación de servizos e a colaboración e fomento da investigación.

- A colaboración coa docencia, así como a reciclaxe, actualización e especialización profesional dos posgraduados e o apoio á formación continuada dos profesionais.
- A colaboración e fomento da investigación experimental e a derivada da propia casuística do hospital veterinario universitario.
- Prestación de servizos, asesoramento e colaboración coas institucións públicas e privadas no control da saúde pública.

Terceiro.

Que ambas as partes teñen a intención de asinar un convenio de colaboración para desenvolver actividades de interese común

ACORDAN

Primeira.- Obxecto do Acordo.

Que en canto o convenio pase todos os trámites legais que impón a lei 40/2015, do 1 de outubro, de Réxime Xurídico do Sector Público será asinado por ambas partes o convenio que inclúe os compromisos e financiamento expostos nas seguintes cláusulas.

Segunda.- Compromisos da Fundación Rof Codina a incluír no futuro convenio.

A FUNDACIÓN ROF CODINA realizará, no marco da colaboración definida neste convenio, as seguintes actividades:

- Vixilancia da saúde dos animais pertencentes á explotación, con todas os servizos clínicos que sexan necesarios para dita actividade.
- Realización de actividades docentes da materia do Rotatorio do Grao de Veterinaria nas instalacións da granxa e en presenza de alumnos.
- Realización de actividades docentes de posgrao da Fundación Rof Codina nas instalacións da granxa e en presenza de alumnos.

Terceira.- Compromisos da Granxa equina de GALECER GALICIA, S.L. a incluír no futuro convenio.

- Colaborar e asesorar á Fundación Rof Codina para contribuír ao perfeccionamento e consolidación dos seus obxectivos.
- Permitir o acceso ás súas instalacións ao alumnado do Grao de Veterinaria da USC, sempre acompañados por persoal docente.
- Permitir o acceso ás súas instalacións a persoal en formación de posgrao da Fundación Rof Codina.

Cuarta.- Financiamento do futuro Convenio.

Para o financiamento do presente convenio GALECER GALICIA, S.L. aboará á FUNDACIÓN ROF CODINA os seguintes custos derivados da actividade de vixilancia da saúde dos animais da granxa:

- O importe integro do custo do material funxible gastado nestas actividades.
- O importe integro dos fármacos gastados nestas actividades.
- O importe integro do custo de desprazamento dos/as facultativos/as do servizo de équidos do HVU-RC.
- O importe, cun desconto do 30% dos servizos dos profesionais veterinarios.
- O importe integro do resto de custos que poidan xurdir da actividade de vixilancia da saúde non contemplados na relación anterior.

E en proba de conformidade con canto antecede, as partes asinan o presente Convenio de Colaboración, por duplicado exemplar, no lugar e data indicados no encabezamento.



Javier González Fraga
Representante de Galecer Galicia, S.L.



Luis Felipe de la Cruz Palomino
Director xerente da Fundación Rof Codina

CONVENIO DE COLABORACIÓN ENTRE A FUNDACIÓN ROF CODINA E GALECER GALICIA, S.L.

En Lugo, a ____ de _____ de 2019

REUNIDOS

Dunha parte Carmen Pomar Tojo, actuando en calidade de Presidenta da FUNDACIÓN ROF CODINA, no exercicio das facultades que lle confire o artigo 13.B dos Estatutos da Fundación que ten o seu domicilio na cidade de Lugo, no Campus Universitario, Estrada da Granxa, 51; atopándose inscrita no Rexistro de Fundacións de Interese Galego e no censo de Entidades Xurídicas do Ministerio de Economía y Hacienda co C.I.F. G27182856.

Doutra parte, don Javier González Fraga, con DNI: 35324416G actuando en calidade de representante de GALECER GALICIA, S.L. con NIF: B70369152, empresa xestora da granxa equina con REGA ES150800099601 e enderezo en Marco das Pías, 3, 15815 Sobrado dos Monxes (A Coruña)

EXPOÑEN

Primeiro.

Que GALECER GALICIA, S.L. ten interese en que se desenvolvan nas súas instalacións actividades docentes, de investigación e de prestación de servizos por parte do alumnado da Facultade de Veterinaria, así como por persoal en formación da Fundación Rof Codina.

Que GALECER GALICIA, S.L. ten interese en por os animais da súa propiedade a disposición do HVU-RC e da Facultade de Veterinaria para o desenvolvemento de actividades con obxectivos comúns.

Segundo.

Que a FUNDACIÓN ROF CODINA é unha organización establecida sen ánimo de lucro, de carácter fundacional, con personalidade xurídica propia e plena capacidade de obrar, podendo realizar todos aqueles actos que sexan necesarios para o cumprimento da finalidade para a que foi creada, con suxeición ao establecido no ordenamento xurídico. Réxese pola

Carta Fundacional e os seus Estatutos, administrando os bens mobles e inmobles que constitúen o denominado Hospital Veterinario Universitario Rof Codina (HVU-RC) e o denominado Centro de Biomedicina e Veterinaria (CEBIOVET).

Que a Fundación Rof Codina ten, entre os seus obxectivos, a colaboración coa docencia, a prestación de servicios e a colaboración e fomento da investigación.

- A colaboración coa docencia, así como a reciclaxe, actualización e especialización profesional dos posgraduados e o apoio á formación continuada dos profesionais.
- A colaboración e fomento da investigación experimental e a derivada da propia casuística do hospital veterinario universitario.
- Prestación de servizos, asesoramento e colaboración coas institucións públicas e privadas no control da saúde pública.

Terceiro.

Que o labor tanto do HVU-RC como do CEBIOVET vai máis alá da docencia, porque ten vocación de servizo á sociedade e abrangue a actividade clínica e o fomento da investigación. Esta tripla orientación propicia que dea resposta a unha demanda educativa no Grao de Veterinaria que busca uns estándares de calidade indispensables para manter a súa homologación, xunto co resto das áreas do coñecemento da Facultade de Veterinaria, pola European Association of Establishments for Veterinary Education (EAEVE). Ademais participa activamente no ensino de posgrao e a formación continuada dos profesionais das Ciencias da Saúde.

Cuarto.

Que, entre os obxectivos docentes do HVU-RC e do CEBIOVET figuran:

- Formación Práctica a alumnos da Facultade de Veterinaria.
- Reciclaxe, actualización e especialización profesional dos posgraduados.
- Apoio á formación continuada e referencia para profesionais en materia de saúde pública, ambiental e pecuaria.
- Formación especializada nas diferentes vertentes clínicas da profesión.
- Actividade práctica en réxime de colaboración con outros organismos públicos e centros universitarios.
- Organización de xornadas de estudo, orientación ou cursos e monográficos clínicos.

Quinto.

Que para o cumprimento dos obxectivos docentes do HVU-RC e do CEBIOVET é preciso dispor dun número de animais mínimo de todas as especies de interese, entre a que se encontra a especie equina.

Sexto.

Que ambas as partes manifestan o seu interese en impulsar proxectos conxuntos. Ademais, tamén comparten o interese por estreitar as súas relacións, unir esforzos e establecer normas amplas de actuación que canalicen e incrementen, dentro dun marco preestablecido, os contactos e colaboracións

Sétimo.

Que ambas as partes, recoñecen a existencia de obxectivos e intereses comúns no ámbito da investigación, a docencia e a prestación de servizos, así como a vontade de colaborar e establecer fórmulas de cooperación que contribúan ao cumprimento dos seus fins, e por iso acordan o presente Convenio de Colaboración, que se rexerá mediante as seguintes

CLÁUSULAS

Primeira.- Obxecto do Acordo.

O presente convenio ten como obxecto determinar o marco de colaboración entre GALECER GALICIA, S.L. e a FUNDACIÓN ROF CODINA en programas conxuntos para o fomento de actividades de interese común en investigación, docencia e innovación, concretándose en Convenios específicos no marco do presente convenio.

Segunda.- Compromisos da FUNDACIÓN ROF CODINA.

A FUNDACIÓN ROF CODINA REALIZARÁ, no marco da colaboración definida neste convenio, as seguintes actividades:

- Vixilancia da saúde dos animais pertencentes á explotación, con todas os servizos clínicos que sexan necesarios para dita actividade.
- Realización de actividades docentes da materia do Rotatorio do Grao de Veterinaria nas instalacións da granxa e en presenza de alumnos.

- Realización de actividades docentes de posgrao da Fundación Rof Codina nas instalacións da granxa e en presenza de alumnos.

Terceira.- Compromisos de GALECER GALICIA, S.L.

- Colaborar e asesorar á Fundación Rof Codina para contribuír ao perfeccionamento e consolidación dos seus obxectivos.
- Permitir o acceso ás súas instalacións ao alumnado do Grao de Veterinaria da USC, sempre acompañados por persoal docente.
- Permitir o acceso ás súas instalacións a persoal en formación de posgrao da Fundación Rof Codina.

Cuarta.- Financiamento do Convenio.

Para o financiamento do presente convenio GALECER GALICIA, S.L. aboará á FUNDACIÓN ROF CODINA os seguintes custos derivados da actividade de vixilancia da saúde dos animais da granxa:

- O importe integro do custo do material funxible gastado nestas actividades.
- O importe integro dos fármacos gastados nestas actividades.
- O importe integro do custo de desprazamento dos/as facultativos/as do servizo de équidos do HVU-RC.
- O importe, cun desconto do 30% dos servizos dos profesionais veterinarios.
- O importe integro do resto de custos que poidan xurdir da actividade de vixilancia da saúde non contemplados na relación anterior.

Quinta.- Seguimento, vixilancia e control.

Ao abeiro do presente Convenio, créase unha Comisión de Seguimento e Coordinación das accións que se recollen no mesmo, que contará con polo menos con dous representantes designados por cada parte.

Para a adopción de acordos requirirase a presenza de, cando menos, tres membros.

A Presidencia desta Comisión de Seguimento do Convenio Marco desempeñárase alternativamente por cada unha das partes durante cada ano natural, correspondendo a quenda inicial á Fundación Rof Codina .

O Secretario da Fundación Rof Codina actuará como secretario sen voz nin voto, e levantará a acta correspondente ás sesións, asumindo a función de custodia da documentación.

Corresponde á Comisión de Seguimento a resolución de cantas cuestións se susciten en torno á interpretación e aplicación do presente Convenio Marco. Para un mellor desenvolvemento das súas reunións e para favorecer os fins do Convenio Marco poderá invitar ás súas reunións con voz pero sen voto a expertos externos, así como a representantes doutras administracións.

Esta comisión velará polo axeitado cumprimento das obrigas e compromisos asumidos por cada unha das partes, e determinará, no caso de existir prexuízo económico derivado dos incumprimentos, a posible indemnización, que deberá ser proporcionada ao dito prexuízo. No caso de incumprimento reiterado de obrigas a comisión poderá promover a resolución do convenio.

Esta Comisión reunirase, con carácter ordinario, como mínimo dúas veces ao ano. Poderá ter sesións, con carácter extraordinario, por decisión do presidente, por iniciativa propia ou a instancia de calquera das partes.

Sexta.- Vixencia do Convenio.

O prazo de vixencia do presente convenio será un ano desde o día seguinte ao da súa sinatura, podendo prorrogarse por períodos anuais por acordo unánime das partes.

De acordo ao regulado no artigo 49.h.2 da lei 40/2015, do 1 de outubro do Réxime Xurídico do Sector Público o convenio unicamente poderá prorrogarse até un máximo de catro anos.

Sétima.-Resolución e modificación do Convenio.

As partes poderán modificar o presente documento en calquera momento por mutuo acordo. O convenio poderá extinguirse se se incorre nas causas de resolución recollidas no artigo 51.2 da Lei 40/2015.

Oitava.- Réxime Legal.

O presente convenio terá carácter de convenio asinado entre unha entidade de dereito público e un suxeito de dereito privado, rexéndose os seus efectos polo establecido nas cláusulas do mesmo.

As cuestións litixiosas que poidan xurdir na interpretación e cumprimento do convenio, que non quede solucionada pola Comisión de Seguimento prevista na cláusula sexta, serán de coñecemento e competencia da Orde Xurisdiccional do Contencioso-Administrativo.

O presente convenio queda excluído da Lei de Contratos do Sector Público de acordo co establecido no artigo 6 da Lei 9/2017 de 08 de novembro.

Novena.- Publicidade e transparencia.

Debe cumprirse o fixado no artigo 15 da lei 1/2016, do 18 de xaneiro, de transparencia e bo goberno ao respecto da publicidade do presente convenio.

O presente convenio debe ser obxecto de inscrición do rexistro de Convenios da Xunta de Galicia de acordo ao previsto no Decreto 126/2006, de 20 de xullo.

E en proba de conformidade con canto antecede, as partes asinan o presente Convenio de Colaboración, por duplicado exemplar, no lugar e data indicados no encabezamento.



Javier González Fraga
Represente de GALECER GALICIA, S.L.

Carmen Pomar Tojo
Conselleira de Educación, Universidade e Formación
Profesional e presidenta da Fundación Rof Codina.



ROF CODINA

HOSPITAL VETERINARIO UNIVERSITARIO

ACUERDO FUNDACIÓN ROF CODINA- EXPLOTACIONES EQUINAS.

Tlf - 982 820 920 / Fax - 982 254 108 / hospital@rofcodina.org

15 anim

En Lugo a 27 de febrero de 2019.

SE REUNEN

De una parte D. Luis Felipe de la Cruz Palomino, como Director Gerente de la Fundación Rof Codina (Hospital Veterinario Universitario Rof Codina), en adelante FRC, la cual tiene domicilio en la ciudad de Lugo, Campus Universitario Estrada da Granxa 51 e inscrita en el Rexistro de Fundacions de Interese Galego y en el censo de Entidades Xurídicas del Ministerio de economía y Hacienda con CIF G 27182856.

Y de otra parte D. **ANTONIO CABANAS R.** como propietario responsable de la Yeguada

Con código ganadero **DNTJ 33317433R**

Y domicilio en **Rua do Liño 20. Galegos 27293. LUGO**

Para el establecimiento del presente **acuerdo docente asistencial** entre ambas partes:

PRESTACIONES POR PARTE DE LA UNIDAD DE EQUIDOS .

El docente responsable en la Unidad de équidos del HVU Rof Codina se trasladará a cada una de las explotaciones incluidas en el acuerdo acompañado de los alumnos de la materia Rotatorio para llevar a cabo las siguientes intervenciones:

Control del estado general de salud de los animales adultos.

- 1.1 Exploración general del animal con un registro de los parámetros en la ficha dispuesta a tal efecto. Dos visitas anuales a cada animal adulto gratuito.
- 1.2 Extracción sanguínea venosa para hematología, frotis sanguíneo y preparación de suero autólogo. Dos visitas anuales a cada animal adulto gratuito.
- 1.3 Coprología de caballos adultos: interpretación y diagnóstico. **NO INCLUYE TRATAMIENTOS ANTIPARASITARIOS.** Se llevará a cabo 2 veces al año en cada animal y será gratuito.
- 1.4 Coprología potros de destete. Interpretación y diagnóstico. **NO INCLUYE TRATAMIENTOS ANTIPARASITARIOS.** Se llevará a cabo en el momento del destete del animal.

La fecha de inicio del presente acuerdo será 2 de septiembre de 2019.

Fdo. D. Luis Felipe de La Cruz Palomino.

Fdo. D.



ROF CODINA

HOSPITAL VETERINARIO UNIVERSITARIO

ACUERDO FUNDACION ROF CODINA- EXPLOTACIONES EQUINAS.

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35awm

En Lugo a 27 de febrero de 2019.

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Y de otra parte D. *Luis Vaquer Lata* como propietario responsable de la Yeguada

Los Guedos Con código ganadero

Y domicilio en *Sta. M^a de Boveda. Burela n^o 2. Lugo*

Para el establecimiento del presente **acuerdo docente asistencial** entre ambas partes:

PRESTACIONES POR PARTE DE LA UNIDAD DE EQUIDOS.

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Fdo. D. Luis Felipe de La Cruz Palomino.

Fdo. D.



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HOSPITAL VETERINARIO UNIVERSITARIO

ACUERDO FUNDACIÓN ROF CODINA- EXPLOTACIONES EQUINAS.

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16 anim

En Lugo a 27 de febrero de 2019.

SE REUNEN

De una parte D. Luis Felipe de la Cruz Palomino, como Director Gerente de la Fundación Rof Codina (Hospital Veterinario Universitario Rof Codina), en adelante FRC, la cual tiene domicilio en la ciudad de Lugo, Campus Universitario Estrada da Granxa 51 e inscrita en el Rexistro de Fundacions de Interese Galego y en el censo de Entidades Xurídicas del Ministerio de economía y Hacienda con CIF G 27182856.

Y de otra parte D. *Pedro Saavedra Salvadores* como propietario responsable de la Yeguada *Saavedra* Con código ganadero

Y domicilio en *Donalbau. Lajosa. O Coso. Lugo*

Para el establecimiento del presente **acuerdo docente asistencial** entre ambas partes:

PRESTACIONES POR PARTE DE LA UNIDAD DE EQUIDOS.

El docente responsable en la Unidad de équidos del HVU Rof Codina se trasladará a cada una de las explotaciones incluidas en el acuerdo acompañado de los alumnos de la materia Rotatorio para llevar a cabo las siguientes intervenciones:

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Fdo. D. Luis Felipe de La Cruz Palomino.

Fdo. D.



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Y de otra parte D. *Luis M. Díaz Aldegunde* como propietario responsable de la Yeguada

Con código ganadero *Ganadería Vizano*.

Y domicilio en *S. Cristobal de Chamoso 9. O cargo. Lugo*

Para el establecimiento del presente **acuerdo docente asistencial** entre ambas partes:

PRESTACIONES POR PARTE DE LA UNIDAD DE EQUIDOS.

El docente responsable en la Unidad de équidos del HVU Rof Codina se trasladará a cada una de las explotaciones incluidas en el acuerdo acompañado de los alumnos de la materia Rotatorio para llevar a cabo las siguientes intervenciones:

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Fdo. D. Luis Felipe de La Cruz Palomino.

Fdo. D.



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Y de otra parte D. **PABLO YANES RIVAS** como propietario responsable de la Yeguada

CIENMILLAS Con código ganadero

Y domicilio en **CARRETERA PASCUAL Nº 7 PASCUAL OTRO DE PEI. LUGO**

Para el establecimiento del presente **acuerdo docente asistencial** entre ambas partes:

PRESTACIONES POR PARTE DE LA UNIDAD DE EQUIDOS .

El docente responsable en la Unidad de équidos del HVU Rof Codina se trasladará a cada una de las explotaciones incluidas en el acuerdo acompañado de los alumnos de la materia Rotatorio para llevar a cabo las siguientes intervenciones:

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La fecha de inicio del presente acuerdo será 2 de septiembre de 2019.

Fdo. D. Luis Felipe de La Cruz Palomino.

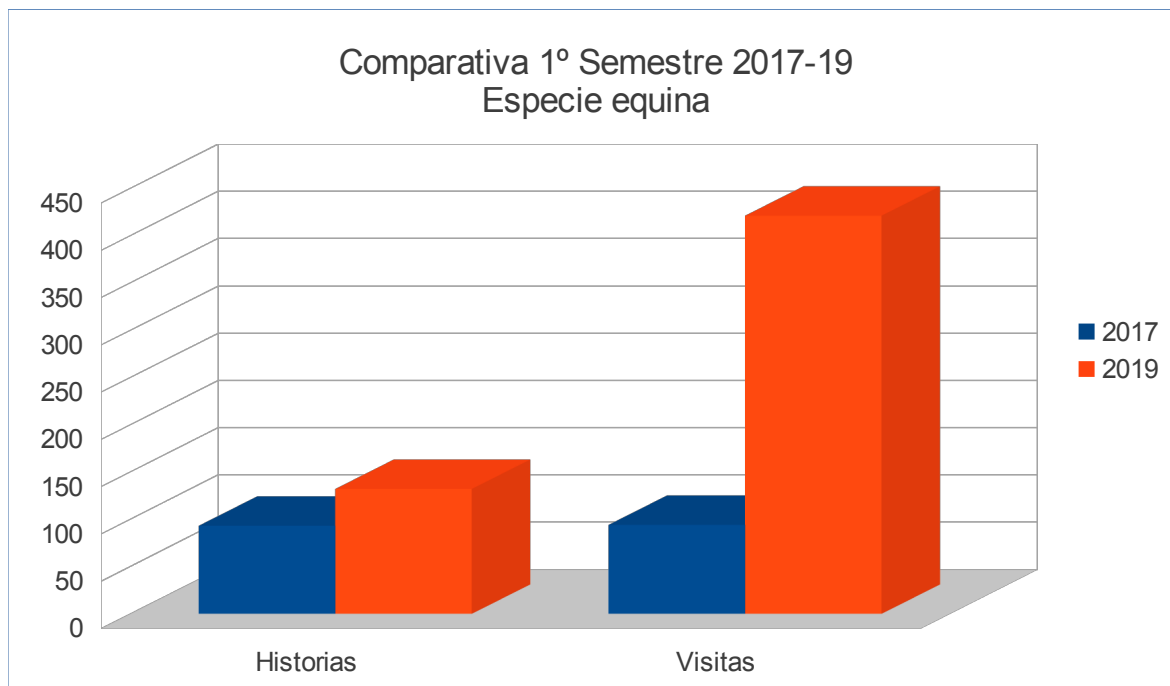
Fdo. D. 

Annex 5.2.B

Equine caseload during the first semester of 2019

Resumen

	1º Semestre	
	2017	2019
Historias	93	132
Visitas	94	421


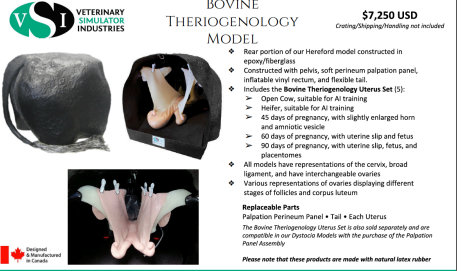




Annex 5.2.C

Bovine and equine high-fidelity reproduction Simulator Models

Annex 5.2.D: New Reproductive Simulator Models

- 1 x Compac Model Dystocia Simulator
- 2 x Bovine Theriogenology Model
- 1 x Deluxe Complete Bovine Package
- 1 x Super Complete Equine Package

Compac Model Dystocia Simulator	2 x Bovine Theriogenology Model
 <p>VSI VETERINARY SIMULATOR INDUSTRIES</p> <p>COMPACT MODEL DYSTOCIA SIMULATOR \$14,250 USD <small>Crating/Shipping/Handling not included</small></p> <ul style="list-style-type: none"> ◆ Tabletop simulator that is modeled as a Hereford ◆ Steel reinforced epoxy/fiberglass construction, with water resistant components throughout for ease of cleaning. ◆ 0.65m tall and 1.3 long, tail to bulkhead and 0.8m at widest point ◆ Matching calf included ◆ Inflatable calf air bed support system ◆ Clear vinyl uterine bag ◆ Soft, durable perineum panel ◆ Soft removable tail ◆ Replica polyurethane pelvis ◆ Padded fetal extractor, obstetric chain and head snare ◆ Landing mat provided to prevent damage to calf <p>Replaceable Parts Birthing Perineum Panel • Uterine Bag • Tail • Calf The Compact Dystocia Model is also compatible with our Bovine Theriogenology Uterus Set</p> <p>See our Bovine product videos at www.youtube.com/vetsimulators</p> <p>1-403.262.9393 WWW.VETSIMULATORS.COM</p>	 <p>VSI VETERINARY SIMULATOR INDUSTRIES</p> <p>BOVINE THERIOGENOLOGY MODEL \$7,250 USD <small>Crating/Shipping/Handling not included</small></p> <ul style="list-style-type: none"> ◆ Rear portion of our Hereford model constructed in epoxy/fiberglass ◆ Constructed with pelvic, soft perineum palpation panel, inflatable vinyl rectum, and flexible tail. ◆ Includes the Bovine Theriogenology Uterus Set (5): <ul style="list-style-type: none"> ➤ Open Cow, suitable for AI training ➤ Heifer, suitable for AI training ➤ 45 days of pregnancy, with slightly enlarged horn and amniotic vesicle ➤ 60 days of pregnancy, with uterine slip and fetus ➤ 90 days of pregnancy, with uterine slip, fetus, and placentomes ◆ All models have representations of the cervix, broad ligament, and have interchangeable ovaries ◆ Various representations of ovaries displaying different stages of follicles and corpus luteum <p>Replaceable Parts Palpation Perineum Panel • Tail • Each Uterus The Bovine Theriogenology Uterus Set is also sold separately and are compatible in our Dystocia Models with the purchase of the Palpation Panel Assembly</p> <p>Please note that these products are made with natural latex rubber</p> <p>1-403.262.9393 WWW.VETSIMULATORS.COM</p>

Breed 'n' Betsy Super Complete Bovine/Equine Package	Super Complete Equine Package
 <p>DELUXE COMPLETE BOVINE PACKAGE</p> <p>Breed 'n' Betsy Deluxe Complete Bovine Frame and Water Rectum Package with- Bovine Artificial Breeding, Pregnancy Diagnosis, Ovary Palpation, Reproductive tract Palpation and retraction. Due to the successes of the Water Rectum I do not use real cadaver tracts, if I have access to them for the Dry checks in artificial breeding only, Videos and Photos will be enough for students.</p> <p>Package Includes:</p> <ul style="list-style-type: none"> • 1 x Breed n Betsy Fixed or Portable Frame • 1 x Breed'n Betsy Water Rectum with carry box on wheels • 1 x Bovine Back End • 1 x Bovine pelvis • 1 x Starter cervix attached into a latex reproductive tract (single cervical fold) • 1 x Complete attached into a latex reproductive tract (double cervical fold) 	 <p>SUPER COMPLETE EQUINE PACKAGE</p> <p>Breed n Bonny Super Complete Equine Package, Frame, and Water Rectum with- Equine Pregnancy Diagnosis, Ovary Palpation, and Breeding Cervix's (Bovine Pelvis if needed)</p> <p>Package Includes:</p> <ul style="list-style-type: none"> • Breed n Bonny Fixed or Portable Frame • Water Rectum • Water Rectum carry box • Canvas carry bag for all accessories • Equine Back End • Equine Pelvis • 1 x Pelvic wall with clips to attach all latex accessories • 1 x Pregnancy Diagnosis Training Kit • 1 x Non Pregnant Uterine Horn • 1 x 16 Day Pregnancy with two vesicles (palpation and ultrasound) • 1 x 28 Day Pregnancy (palpation)

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| <ul style="list-style-type: none"> • 1 x Advanced complete cervix attached into a latex reproductive tract (double cervical fold) • 1 x Advanced starter cervix attached into a latex reproductive tract (single cervical fold) • 1x Vagina fold reproductive tract with cervix included • 4 x Complete cervixes (single cervical folds) • 4 x Advanced complete cervixes (double cervical folds) • 4 x starter cervix's (single cervical fold) • 4 x Advanced starter cervix's (double cervical folds) • 1x Water Rectum Starter Cervix without cervical fold • 1x Water Rectum Starter Cervix with cervical fold • 1x Water Rectum Advanced cervix, including off center entrance without cervical fold • 1x. Water Rectum Advanced Cervix including off center entrance including internal cervical fold • X2 stainless steel pipettes for the breeding cervixes through the Water Rectum • 12x 1ft (30 cm) acrylic pipettes for individual cervical training in class rooms • 1 x Pelvic wall with clips to attach all latex accessories without using the Water Rectum • 1x Small (heifer) size silicon reproductive tract with ovaries attached • 1x Medium (2-3 year old cow) size silicon reproductive tract with broad ligaments to attach ovaries • 1x Large (older cow) size silicon reproductive tract with broad ligaments to attach ovaries • 11x interchangeable ovaries which attaches to the Medium and Large reproductive silicon tracts
(Ovaries include: Non Cycle, Corpus Luteum, Cyst and Follicles) • 1 x Rectal Wall • 1 x Pregnancy Diagnosis Training Kit with includes: 6, 7, 8 & 9/10 week, 11/12 week silicon uteri also placenta with 4 month placentomes. • Uterine artery pregnancy set which includes: Punny and pulsing artery 5, 6, 7 and 8 month artery. (5 sizes) • 2 x Water Rectum palpation liners • 6 x Anis sphincter rings • 1x set of spare "WR" latex broad ligaments • 1 x Artificial Breeding Teaching Manual • 1 x Pregnancy Diagnosis Teaching Manual • 1x Breed n Betsy Operations Manual • 1 x Breed n Betsy accessories kit • Water Rectum Accessories Kit • 1 x Breed n Betsy Carry Bag • (Portable frame will come with a carry bag on wheels) | <ul style="list-style-type: none"> • 1 x 35 Day Pregnancy (palpation) • 1 x 42 Day Pregnancy (palpation) • 1x 49 Day Pregnancy (palpation) • 1 x 56 Day Pregnancy (palpation) • 10 x Different size ovaries with follicles • 5 x Breeding Cervixes with latex attachments • 5 x Spare Breeding Cervixes • 2 x Water Rectum Palpation Liners • 2 x Broad Ligaments • 1x Breed n Bonny Operations Manual • 1x Breed n Bonny Accessories Kit • 1x Water Rectum Accessories Kit |
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